

# The global domain name market in 2022

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### **Definitions**

APTLD: Asia Pacific Top-Level Domain Association.

**CENTR:** Council of European National Top-Level Domain Registries.

ICANN: Internet Corporation for Assigned Names and Numbers.

**TLD (Top-Level Domain):** a domain at the highest level in the hierarchical Domain Name System of the Internet after the root domain. FR and .ORG are top-level domains.

ccTLD (country-code Top-Level Domain): top-level domain corresponding to a territory or country. The ccTLD for France is .FR, but there are other French ccTLDs such as .RE (Réunion), .PM (Saint Pierre and Miquelon), etc.

**gTLD (generic Top-Level Domain):** a generic TLD, not attached to a particular country or territory. .COM, .NET and .ORG are gTLDs.

**Legacy gTLD:** generic TLD created before 2014. Examples include .COM, .NET, .ORG or more recently (2001-2004) .INFO, .BIZ, .MOBI, etc.

**nTLD (new Top-Level Domain):** generic TLD created after 2014. nTLDs are divided into several sub-segments such as geoTLDs (regions, cities, etc.), community TLDs (community-based), .brand (TLDs corresponding to major brands) or generic nTLDs (common dictionary terms).

**Penny TLD**: TLD that is free or sold at a very low price and/or with a very high creation rate combined with a very low renewal rate.

**Annualised creation rate:** total number of create operations over the last 12 months/stock end of period

**Annualised maintenance rate:** (Stock end of period – creations over the last 12 months)/stock start of period (12 months earlier)

### Introduction

The publication at the beginning of April 2023 of ICANN statistics for the year ended 31 December 2022 allows a quantified assessment of 2022.

The data on which this study is based come from ICANN reports (Transactions - registries), from information provided by registries in certain frameworks such as the Council of European National Top-Level Domain Registries (CENTR) or the Asia-Pacific Top-Level Domain Association (APTLD) or via their websites, and from research conducted by Afnic. In some cases, we have also relied on specialised sites such as https://ntldstats.com.

Our figures may vary slightly from those reported by other sources, in particular due to the lack of precise data for certain country code Top-Level Domains (ccTLDs).

### A supplement to the annual review of the French domain name market

This study supplements our annual review of the French domain name market published at the beginning of each year. It helps put into perspective the specific trends of the French market by comparing local data with global data.

By way of reminder:

- the growth of the French market as a whole was 1.3% in 2022 compared with 3.6% in 2021 (for the .FR TLD the respective figures were 2.9% in 2022 and 5.8% in 2021);
- at year-end 2022 the market shares of the various segments in France were 39% for .FR, 45% for .COM, 10% for "Other Legacy" TLDs, 3% for French-owned foreign ccTLDs and 3% for "new TLDs".

We refer the reader to this document for more information on the French market. It can be downloaded free of charge from the Afnic website:

• In French:

https://www.afnic.fr/wp-media/uploads/2023/03/Le-.FR-en-2022.pdf

• In English:

https://www.afnic.fr/wp-media/uploads/2023/03/The-.FR-in-2022.pdf

### 1. Executive summary

At the end of 2022, the global domain name market represented some 355 million domain names, including:

- 164 .million COM names;
- 31 million "Other Legacy TLD" names (.NET, .ORG, .BIZ, .INFO, etc.);
- 31 million "new TLD" names created from 2014 onwards;
- 129 million names under ccTLDs (so-called "geographic" domains).

2022 saw the domain name market grow by 1.9%, compared with 0.9% in 2021 and 1.3% in 2020. This performance is misleading however, as it was due to a very small number of TLDs posting very significant changes.

nTLDs taken as a whole gained 7% in stock, as against losses of 9% in 2021 and 1% in 2020. Their market share increased by one percentage point to 9% and remained marginal compared with those of .COM (46%, down by 1 pp) and ccTLDs (36%, unchanged). The Other Legacy segment was unchanged at 9%.

Overall, if we exclude the .CN TLD, which is still experiencing sharp declines, the general trend was relatively positive for ccTLDs, despite a gradual return to pre-health crisis momentum. Create operations in 2022 were below 2021 levels but remained above 2019 levels.

The .COM TLD was hit hard in 2022, posting two quarters of losses for the first time in its history. But this may well be linked just as much to the post-COVID "return to normal" as to the effect of its price increases in 2021 and 2022 or the tense international situation.

Other Legacy TLDs continued on a downward trend (-0.8%), with relatively contrasting situations. The .ORG TLD posted weak growth (+1%) while the others all declined: .MOBI (-9%), BIZ (-4%), .INFO (-3%), .NET (-1%).

The regional dynamics of the ccTLDs continue to be clearly defined, but they all slowed. Africa was the region with the most growth (+9% compared with 15% in 2021), followed by Asia-Pacific, which recovered (+7% as against -14% in 2021). Then come North America (+5% compared with +6% in 2021), Latin America and the Caribbean (+4% compared with +18% in 2021) and Europe (+1% as against +3%). Globally, the segment grew by 3%, compared with a slight loss (-0.3%) in 2021. Europe posted the biggest loss in terms of market share (-1.2 pp), primarily to the benefit of Asia-Pacific (+1 pp).

ccTLDs continue to thrive best in Europe: out of 29 ccTLDs with over a million names, 17 are in Europe, six in Asia-Pacific, three in Latin America and the Caribbean, two in North America, and one in Africa.

Among the nTLD segments, Generic nTLDs gained 8% in stock and 7% in create operations. Community TLDs lost 2% in stock but saw their create operations soar by 268%. Geographic TLDs also lost stock (-1%) and saw their create operations tumble (-62%). Lastly, .BRAND TLDs gained 12% in stock and 15% in create operations.

Retention rates were particularly high among .BRANDS (94%), relatively good for Geographic TLDs (86%), open .BRANDs (81%) and Community TLDs (78%) and low for Generic TLDs (47%).

60% of the new TLDs other than .BRAND had fewer than 10,000 names in portfolio, while just 1% had more than 500,000. For many of them (other than the .BRAND domains), these low volumes constitute a serious impediment to breaking even and financing their development, and this reinforces the trend towards consolidation of portfolios of nTLDs

"Penny nTLDs" represent 16 TLDs and 15 million domain names (compared with 25 TLDs and 16 million names in 2021), i.e. 1% of nTLDs and 53% of the overall nTLD stock. However, the

composition of this very specific category is far from constant, with only two domains considered "penny-TLDs" since 2019 (.ONLINE and .STORE).

The market for back-end registry operators acting on their own account or on behalf of third parties is dominated by a few players, the three biggest of which are Identity Digital (Afilias+Donuts), GoDaddy and CentralNic with respectively 35%, 19% and 9% of the nTLDs managed for name volumes representing 19%, 12% and 19% of all the names registered as nTLD.

The study of the distribution of domain names in the various ICANN regions (by holders' countries) shows that ccTLDs are still leaders in every region except North America, which is dominated by the .COM domain. The .COM domain lost ground overall in 2022 but with varying fortunes depending on the region. North America remains its focus region and the region in which it is the undisputed leader.

Other Legacy TLDs and nTLDs are still very much in the minority, even in North America where their market shares are most significant.

These data underline how difficult it is for new entrants to make their mark in the face of cultural prisms that in one case prize notions of territory and proximity, and in the other case (North America) favour a global approach and are wary of any reductive specific feature induced by the TLD chosen.

The other major determinant of the market is location, the most powerful registrars being located in North America. Their counterparts in other regions are smaller, and sell ccTLDs just as well as, if not better than, gTLDs and nTLDs in order to respond to local demand and to the competition to which it leads.

The concentration process continued in 2022 both horizontally and vertically. The major players are also looking to position themselves on markets related to domain names, while players that have developed outside of this market are successfully making their mark (Google and Wix are among the top 10 global registrars, for example).

The still unknown date for the 2nd ICANN round is causing uncertainty in the market and adding impetus to the process of concentration insofar as players looking to grow quickly are effectively limited to buying up existing TLDs as opposed to investing in the creation of new markets. However, ICANN seems to have decided to move forward on this subject, something that is bringing hope to a number of players.

The development of commercial nTLDs continues to be a source of concern, as most have not reached a size that allows them to exceed their break-even point. Their financial situation and the difficulties in accessing the market caused by registrars unwilling to take risks for "new entrants" also contribute to this concentration. This leads to sales of nTLDs to big players able to obtain economies of scale and have their own registrars to reach target audiences. Nevertheless, these players' registrar networks seem to work in the same way as those of their competitors, that is to say as "wholesalers" without targeting specific user groups that could be directly interested in the TLDs held in the portfolio.

For all these reasons, and as already commented in previous years, the registry-registrar system will no doubt have to change in the future, by increasingly favouring the emergence of specialised or proximity resellers, who will take care of marketing nTLDs to the niches concerned, having a smaller number of registrars as suppliers. This "logical" process appears to be at a standstill.

As regards the registries, work was mainly focused on services linked to the fight against abuse via the DNS and processes to identify holders using digital identity certificates (two subjects which are closely connected). We are not, however, seeing fundamentally innovative offerings emerge resulting from R&D initiatives.

### 2. Global trends

The domain name market (excluding Penny-TLDs) represented approximately 355 million names worldwide at the end of 2022, up by 1.9% from 2021 (352 million). This uptick in the growth dynamic marks a break in the trend observed since 2019 (+4.7% in 2019, +1.3% in 2020, +0.9% in 2021). As we had speculated in last year's study, 2021 was the "trough" year and 2022 saw a relative recovery.

### 2.1 Towards a resumption of growth?

The following figure shows that despite strong contrasts in their developments in 2020 and 2021, the different segments were all headed towards a return to their pre-COVID growth rates at the end of 2021. This stabilisation was confirmed in 2022, although global performance was affected by the difficulties of the .COM TLD.

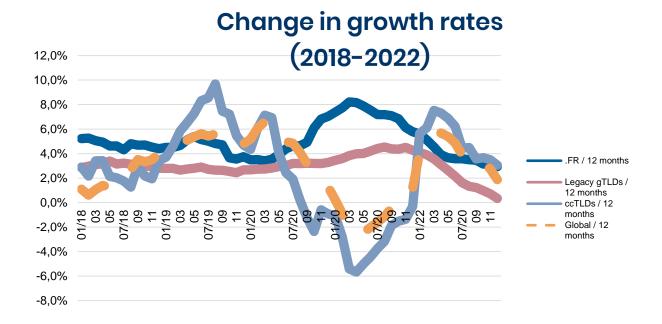


Figure 1: Change in growth rate (2018-2022)

Conditioned by that of .COM, the growth of Legacy TLDs continued to tend towards zero, ending 2022 in equilibrium.

ccTLDs, affected by the sharp variations in both directions of major TLDs such as .CN (China) and .UK (United Kingdom), regained their 2018 growth rate, at around 3%.

The .FR domain followed the general trend, with a slow deceleration.

In this report, we will explain the causes of these developments which may sometimes be misleading, covering numerous distinct phenomena.

New TLDs are not included in this figure as their large variations would overwrite the other curves. These were +15% in 2018 and +20% in 2019 but -1% in 2020, -9% in 2021 and +9% in 2022. This recovery can be attributed to the end of the "purge" of the .ICU TLD, no significant waves of create operations having been observed in 2022.

### 2.2 Varied performances by the COM domain

The table below shows the main indicators for each market segment between 2020 and 2022.

	Stock (m DNs)		Variations (%)			Market share (%)			
	2020	2021	2022	2020	2021	2022	2020	2021	2022
.сом	155	164	164	4,4 %	5,8%	1,1%	44 %	47%	46%
Other Legacy TLDs *	32	32	31	-1,8 %	-0,7%	-0,8%	10 %	9%	9%
nTLD	32	29	31	-1,0 %	-9,4%	7,2%	9 %	8%	9%
Total gTLD **	219	225	226	2,6 %	3,7%	1,2%	63 %	64%	64%
ccTLD ***	130	125	129	-0,9 %	-3,8%	3,0%	37 %	36%	36%
TOTAL	349	350	355	1,3 %	0,9%	1,4%			
Penny ccTLD ****	41	27	13	-15 %	-34,1%	-55,1%			

Table 1: Performance indicators for the major segments (2020 – 2022)

M DNs: year-end data expressed in millions of domain names.

With 164 million names (unchanged in 2022, +9 million in 2021), the .COM domain name remains the leader but lost one percentage point of market share, falling to 46%.

The "Other Legacy" TLDs continued to lose stock in 2022, but only marginally. The trend is one of slow decline.

<sup>\*</sup> Other Legacy TLDs: generic TLDs created before 2012, such as .AERO, .ASIA, .BIZ, .NET, .ORG, .INFO, .MOBI, etc.

<sup>\*\*</sup> Total gTLDs: measures all the domain names managed under a contract with ICANN. This includes the new TLDs, some of which are not, strictly speaking, "generic".

<sup>\*\*\*</sup> ccTLDs or "country code Top-Level Domains", i.e. domains corresponding to territories, such as .FR for France.

The data presented do not include "Penny TLDs" i.e. ccTLDs retailed at very low prices, if not free of charge. These ccTLDs are subject to very large upward and downward movements that do not reflect actual market developments and distort aggregate data.

<sup>\*\*\*\*</sup> Penny ccTLDs: estimated volume of names filed in these "low-cost" or free domains.

New TLDs posted a gain in stock of 7%, continuing the recovery observed since summer 2021.

Country TLDs (ccTLDs) ended the year with growth of 3%, practically regaining their year-end 2020 levels in terms of stock.

These performances, while better than those of 2020 and 2021, had very little effect on market shares. The only really significant change is the 1 pp loss of the .COM domain, which had for many years played the role of driver of the domain name market.

We will now look in more detail at how each segment performed over 2022.

# 2.3 nTLD, towards the "age of reason"?

The chart below shows a quarterly view of the change in market share of the various segments over the past five years.

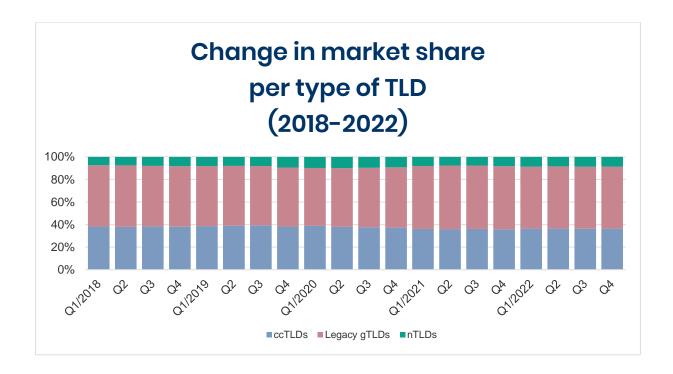


Figure 2: Change in market share per type of TLD (2018-2022)

nTLDs peaked at 10% in mid-2020, but in general their market share remained between 8% and 10%, with no major improvements or deteriorations.

For their part, ccTLDs peaked at 40% in mid-2019 before declining and then stabilising at around 36%.

Lastly, gTLDs managed to defend their market share against rivals old (ccTLDs) and new (nTLDs). But as we can see above, this stability reflects the dynamic of the .COM domain, which despite its lacklustre performance, continues to gain places from the declining "Other Legacy" TLDs.

The 20/80 rule (and even the 5/95 rule) still applies: a small number of TLDs accounted for the bulk of the net balance (positive or negative), thus masking the performances of the other TLDs.

### 2.4 Decline of the .COM domain in 2022

The same data expressed as net balances highlight the weight of the different segments in the overall performance of the market in 2022.

Having provided the bulk of the positive net balance in 2020 and 2021, in 2022 the .COM domain contributed just 14% of the positive variation in the market.

Other Legacy TLDs did not deliver any surprises, but nTLDs (32%) and ccTLDs (58%) saw their contributions increase sharply relative to 2021. This observation allows us to hope for future growth of a market made more solid by an improved equilibrium among the dynamics of the various segments.

	Net balance (millions of DNs)			Weight in the total			
	2020	2021	2022	2020	2021	2022	
.сом	6,5	8,2	0,9	148 %	202%	14%	
Other Legacy TLDs	-0,6	-0,2	-0,2	- 14 %	-5%	-3%	
nTLDs	-0,3	-3,5	2,1	- 7 %	-87%	32%	
Total gTLDs	5,6	4,4	2,8	127 %	110%	42%	
ccTLDs (Exc. « Penny »)	-1,2	-0,4	3,8	- 27 %	-10%	58%	
TOTAL	4,4	4,0	6,6	-	-	-	

Table: Net balances of the segments of TLD (2020 - 2022)

These data give us some idea of the relative positions and dynamics of the major market segments - Legacy TLDs, ccTLDs and nTLDs - but they do not explain them. Now let us take a closer look at each of these three segments to try to better understand the phenomena at work in 2022.

### 3. Legacy TLDs in 2022

There are now 18 "Legacy TLDs", or "traditional" domains created before 2012: AERO, ASIA, BIZ, CAT, COM, COOP, INFO, JOBS, MOBI, MUSEUM, NAME, NET, ORG, POST, PRO, TEL, TRAVEL and .XXX.

The stocks of these Legacy TLDs vary enormously, from the handful of names in the .POST domain to the 164 million of the .COM domain.

In order to present relevant summary tables and indicators, we shall distinguish only the six biggest in volume terms, aggregating the other 12 under "Others".

In 2022, the global Legacy stock was in equilibrium, while create operations lost 10%. The difference is due to an improvement in the retention rate, to 79% from 78% in 2021.

Nevertheless, the table shows the extent to which the situations vary.

	Stocks (thousands)			Create operations (thousands)			« R » (thousands) (*)		
	2021	2022	Var.%	2021	2022	Var.%	2022	% 2022	% 2021
.BIZ	1 487	1 435	-4%	296	265	-10%	1 170	79%	83%
.COM	163 501	164 412	1%	41 880	37 521	-10%	126 891	78%	78%
.INFO	4 094	3 967	-3%	802	967	21%	2 999	73%	74%
.MOBI	324	295	-9%	30	27	-10%	268	83%	77%
.NET	13 702	13 503	-1%	2 660	2 454	-8%	11 049	81%	81%
.ORG	11 023	11 170	1%	1 867	1 677	-10%	9 493	86%	85%
Autres	912	934	2%	197	239	21%	695	76%	73%
TOTAL	195 044	195 715	0%	47 732	43 150	-10%	152 565	78%	79%

Table: Performance of the major Legacies (2021 - 2022)

This is because the stock of a TLD at the end of 2022 is mathematically constituted by the names of the stock at 31 December 2021 retained in the portfolio to which have been added the domain name creations of 2022. It is

<sup>(\*) &</sup>quot;R" refers to the number of domain names retained in 2022. This figure is obtained by a fairly simple equation: R = Stock at 31/12/2022 - Create operations 2022.

therefore possible to deduce a retention rate [%R] based on data sent by the various registries to ICANN for the names that were in stock at the end of 2021.

R Rr 2022 = R / Stock 2021

This retention rate should not be confused with the Renewal Rate, which only concerns the names that were up for renewal during the year in question. Names filed for several years are "retained" but not "renewed".

# 3.1 .COM versus other Legacy TLDs: the leader stays ahead

The data presented above show that the situations of the main Legacy TLDs differ profoundly.

.COM dominates in terms of volume (it accounts for 83% of all Legacy TLDs) and also of growth, which remains slightly above zero, whereas all the other major Legacy TLDs, except .ORG, are losing stock. Since the retention rate remains stable, the .COM domain's remaining at break-even in 2022 is due above all to the fall in its create operations.

Among the other major Legacy TLDs, .ORG is the only one to advance (+1%). The performances of the others are more or less poor, ranging from -1% of .NET to -9% for .MOBI.

.INFO doubtlessly benefited from a promotional campaign, with a sharp increase (+21%) in the number of create operations. Its retention rate, which is already low, is likely to suffer from this campaign in 2023.

In general, retention rates are up, except for .BIZ (-4 pp) and .INFO (-1 pp).

It still seems as if users are less and less interested in these domains which were presented, at the time of their creation in 2001, as alternatives to the approaching "saturation" of the .COM domain. In these conditions, create operations are a particularly revealing key indicator.

### 3.2 Create operations in Legacy TLDs

As mentioned above, the .COM domain saw its create operations fall by 10% in 2022, following gains of 6% in 2021 and 4% in 2020. However, this trend is no doubt due just as much to a "return to normal" following the COVID period as to the effect of repeated price increases and the economic and political conditions of 2022.

Breaking down the performance into quarters makes for a better understanding of the dynamic of the .COM domain. In the first two quarters, create operations remained strong; it was only in the last two quarters of the year that they fell. In parallel with this however, delete operations increased throughout the year, equalling Q1 levels of create operations in the second half of the year. Stock, which was growing until the end of the Q2, started to decline thereafter. The retention rate declined by 1 pp between Q1 and Q4, and the creation rate lost nearly 2 pp. The situation of retained names, while less alarming than that of create operations, is nonetheless cause for concern.

.COM	2022							
In millions	Q1	Q2	Q3	Q4				
Stock en of period	164,8	165,1	164,8	164,4				
Quarterly creates	9,6	9,5	9,2	9,2				
Quarterly deletes	-8,2	-9,3	-9,5	-9,6				
Quarterly balance	1,4	0,2	-0,3	-0,4				
4Q maintenance rate	78,6%	78,5%	78,1%	77,6%				
4Q create rate	24,7%	23,8%	23,3%	22,8%				

Table: Quarterly indicators for .COM activity in 2022

The effect of the price rises, if any, remains very restrained: we see create operations settling, but not collapsing, and delete operations, while increasing, have not reached a critical threshold that would cause the retention rate to decline.

The graph below compared the create operations of the .COM domain with those of Other Legacy TLDs and ccTLDs on a monthly basis.

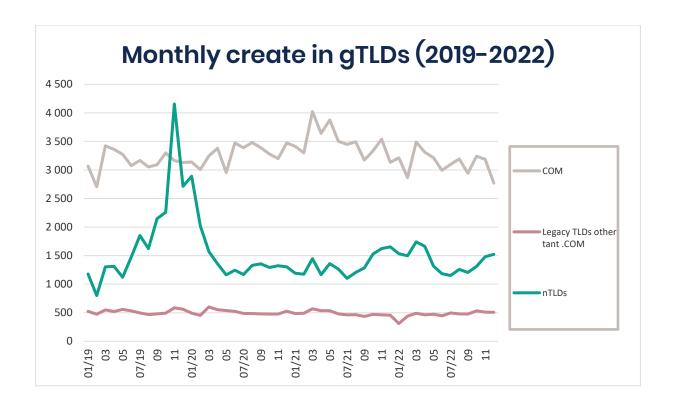


Figure 3: Monthly create in gTLDs (2019-2022)

It clearly shows the downward trend in .COM create operations following the peak of spring 2021. However, the year-end 2022 level is more or less the same as that of early 2019. The question therefore is whether create operations will continue to decline in 2023 (which would indicate a real problem), or steady at around three million a month.

As for Other Legacy TLDs, create operations have remained very stable, slightly below the 500,000 a month bar, since the second quarter of 2021. This phenomenon is interesting in that it shows that, even though these TLDs cannot hope to "conquer the world", they have evidently found a market that continues to "feed" them new registrations. As we have seen above, this observation is based on an average and does not reflect the specific situation of each particular Other Legacy TLD.

nTLDs for their part saw their create operations fall sharply in the first half of 2022 before recovering in the second half to their usual monthly ceiling of 1.5 million in the absence of waves of mass create operations.

Making forecasts for 2023 is therefore tricky, especially for the .COM domain: on the one hand price pressures and macro-economic conditions obviously weigh on performances; and on the other hand, the factors linked to market stabilisation after the COVID shock, which were still relevant in 2022, will no longer make themselves felt in 2023. A scenario of weak growth of between 0 and 2% seems a fairly likely compromise.

### 3.3 Improved retention rate

The retention rate is a key indicator for a TLD. On the one hand, it reflects the "loyalty" of the domain name holders, providing clear information on the durability of the TLD. On the other hand, the financial solidity of a registry depends essentially on the invoicing of renewal fees.

For a reasonable well-established registry, these annual fees generally account for more than 80% of its total revenues. The growth dynamic comes from create operations, but the basis of the registry activity is formed by renewals.

There are close links between the quality of create operations for a given year and the retention rate for the following years. A "highly successful" free campaign can lead to mass delete operations one year later. These rates must also be considered over time, endeavouring to smooth out the variations linked to one-off events.

	2018	2019	2020	2021	2022	2022	Var. 21/22 (in pts)	Avg. 2018-2022
.BIZ	66,9	58,4	74,0	82,7	78,7	- 4,0	72,1	66,9
.COM	78,9	78,1	77,9	78,3	77,6	- 0,7	78,2	78,9
.INFO	57,8	63,9	69,2	73,9	73,3	- 0,6	67,6	57,8
.MOBI	78,2	79,1	77,8	77,4	82,5	5,1	79,0	78,2
.NET	77,1	79,0	81,1	80,6	80,6	-	79,7	77,1
.ORG	80,4	81,9	83,9	84,9	86,1	1,2	83,4	80,4
Autres	73,6	72,0	68,4	72,7	77,4	4,7	72,8	73,6
TOTAL	77,8	77,7	78,2	79,2	78,1	-1,1	78,2	77,8

Table: Change in Retention Rates for Legacy gTLDs (2018 - 2022)

The above table shows the profiles of the strategies adopted by the registries.

If we concentrate on the 6 major Legacy TLDs between 2018 and 2022, we can see that .INFO (68%) and .BIZ (72%) are the two domains with the lowest retention rates. These domains were the subject of aggressive promotion campaigns that ended the following years with equally massive deletions resulting in a discernible deterioration in the Retention Rate. In 2020, such expansive promotion campaigns were not possible and 2021 Retention Rates improved appreciably, before falling once again in 2022.

.ORG is the most stable TLD over the period with an 83% Retention Rate which in 2022 even surpassed 85%.

Against all expectations, the .MOBI domain saw its retention rate gain 5 pp in 2022. This could mean that following years of losses, this TLD has reached a threshold at which the only remaining names are mostly either actually used or registered defensively.

These data are fundamental for the registries: a low retention rate creates the obligation to offset deletions with creations so as not to lose stock. Overly aggressive low-cost strategies lead to vicious cycles in which the registry finds itself forced to boost its creations to maintain its stock, thus causing the quality of the stock to deteriorate even further by encouraging speculative registrations that are not followed by lasting use. The sometimes

spectacular collapse in stocks that can be seen in some nTLDs corresponds to situations where the registry has not been able to maintain the "kite flying" system it had tried to put in place.

Conversely, a TLD with an exceptionally high retention rate but that does not encourage creations becomes the archetypal cash cow, living on its stock as long as the names are not abandoned by their owners. This situation, although a caricature, probably awaits certain Legacy TLDs in the future.

### 3.4 Implications in terms of naming strategies

We have already noted that the improvement in retention rates of certain TLDs could be linked to the end of "purges", that is to say that the names remaining in the portfolio are intended to be kept in increasing proportions.

There are four main reasons for keeping a domain name:

- because it is used and therefore important to its holder;
- because the holder wants to keep the name even if it is not being used at present (ongoing project, conviction that the name will gain value, etc.);
- because it corresponds to a brand that the holder wants to protect (defensive domain registration);
- because the holder has a very relaxed attitude to the management of domain names and renews them without questioning the merits of the operation.

Of all these reasons, the first two are the strongest as they are related to uses or to a perception of value. The latter two are the weakest and very sensitive to price changes and to the appearance of new TLDs that may need to be registered. This leads to disposals in a

context where budgets are not infinitely expandable. The sums spent on defensive registrations in Legacy TLDs are allocated to other defensive registrations in nTLDs, and holders who have managed their portfolios negligently are forced to adopt optimisation strategies. It seems indeed necessary, to reduce costs, to limit creations in relatively unattractive and/or low-risk domains since they are less and less well known to users.

It is more than likely that the Legacy TLDs (including .COM in 2022) suffer from these disposal strategies that dry up their create operations and force them either to carry out aggressive promotional campaigns to temporarily maintain their stocks, or to accept a certain decline while looking for ways to retain their current holders.

The good health of the .COM domain in terms of create operations between 2018 and 2021 (+6% in 2018, +7% in 2019, +4% in 2020, +6% in 2021) was likely due, especially in 2020 and 2021, to users refocusing on the TLDs they knew best. This factor holds good, but now that most businesses with any interest in establishing an online presence did so in 2020/2021, the only remaining sources of create operations are new businesses and new projects, which does not augur well for any substantial increase in registrations.

These different phenomena (refocusing of create operations, disposals of retained names, price increases (not necessarily limited to the .COM domain), relative loss of interest in defensive and speculative operations, temporary effect of saturation of needs) largely explain the lacklustre performance of the .COM domain in 2022 and the decline of the "Other Legacy" TLDs.

We shall now examine whether the same is true of ccTLDs.

# 4. ccTLD (Country-Code Top Level Domains)

Taken as a whole, ccTLDs gained 3% in stock in 2022 compared with a loss of -3.8% in 2021.

However, the overall figure does not reflect the reality experienced by most ccTLD registries in 2022 as it is skewed by the weight of certain major TLDs.

### 4.1 ccTLD creations in 2022

ccTLD creations generally slowed in 2022 compared to 2021 while remaining above 2019 levels. This no doubt reflects the fact that the acceleration of the digital transition brought about by the lockdowns has now acquired a certain permanence.

A study conducted by CENTR of a sample of the biggest ccTLDs indeed shows that in 2022 create operations went from a range of 700,000 to 1 million names a month to one of 600,000 to 800,000 names, as prior to COVID.

At the end of 2022, the number of create operations in our sample had surpassed 800,000, allowing us to hope that in 2023 the level will remain sustained, without falling back to that of 2019.

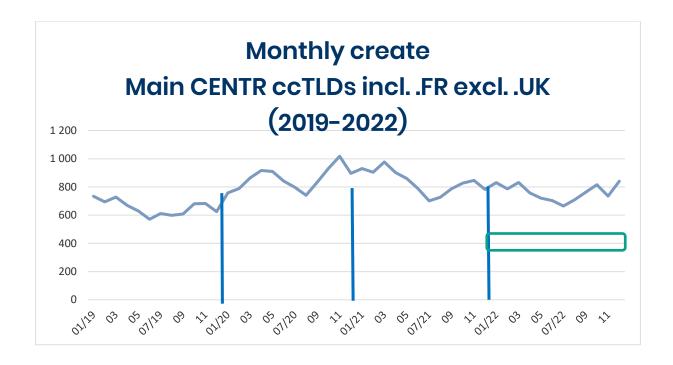


Figure 4: Monthly create - Main CENTR ccTLDs exc. .UK (2019-2022)

### 4.2 The regional dynamics of ccTLDs

The regional dynamics of ccTLDs were less disparate in 2022 than they had been in 2021, with a tendency to converge towards the average.

Asia-Pacific, which had posted substantial losses in 2020/2021, turned positive again (+7%), followed by North America (+5%) and preceded by Africa (+9%), both of which saw their growth slow. Europe followed the same trend (from 3% to 1%), but the most striking change was that of Latin America, whose growth went from 18% to 4%.

These developments have impacts on market share: Asia-Pacific, which in 2019 accounted for one third of names registered in ccTLDs, now represents just one quarter; Europe fluctuates just below 60%, and Latin America and the Caribbean just below 10%. Between 2021 and 2022, the balance is in favour of Asia-Pacific (+1 pp) to the detriment of Europe (-1.2 pp).

Data excl.	Stoc	ck (millio	ns)	Variations (%)		Market share (%)			
"Penny" ccTLDs	2020	2021	2022	2021	2022	2020	2021	2022	21/22
North America	4,7	5,0	5,2	6,3%	5,1%	3,8%	4,0%	4,1%	0,1
Latin America	9,7	11,5	11,9	18,3%	3,7%	7,7%	9,2%	9,3%	0,1
Africa	2,4	2,8	3,1	15,2%	8,8%	1,9%	2,2%	2,4%	0,2
Asia-Pacific	35,7	30,9	33,0	-13,6%	6,9%	28,5%	24,7%	25,7%	1,0
Europe	72,7	74,7	75,4	2,8%	1,0%	58,1%	59,8%	58,6%	- 1,2
TOTAL	125,2	124,8	128,6	-0,3%	3,0%				

Performances of ccTLDs per ICANN region (2021 - 2022)

### **Detail by region**

We will now highlight the most pertinent variations for each region (generally over 100,000 names) and explain the reasons for the variations noted above, while at the same time showing the extent to which the market continues to depend on a small number of TLDs.

North America	Stock (	millions)	Var. (%)	Var. (M)
	2021	2022	2022	2022
.CA	3,2	3,3	3,4%	+ 0,1
.US	1,8	1,9	8,3%	+ 0,1
Others	0	0	4,6%	_
TOTAL	5,0	5,2	5,1%	+ 0,2

The leading ccTLD in North America is the .CA domain (Canada) with 3.3 million names. This TLD continued to benefit from the acceleration of the digital transition in Canada, with growth of 3.4%. The .US domain, with its 1.9 million names, is cast in the role of challenger, but its growth was stronger (8.3%). These two TLD are the region's drivers. They account for the vast majority of names registered.

Africa	Stock (	millions)	Var. (%)	Var. (M)
	2021	2022	2022	2022
.ZA (South Africa)	1,3	1,4	2,9%	0,1
.IO (British Indian Ocean Terr.)	0,8	0,9	17,5%	0,1
Others	0,7	0,8	10,5%	0,1
TOTAL	2,8	3,1	8,8%	0,3

The uncontested leader in the African region is the .ZA (South Africa) domain, with growth of 3% (8% in 2021). It is followed by the .IO (British Indian Ocean Territory) domain, which grew by 18% (34% in 2021). The .IO domain, however, forms part of the "quasi-ccTLDs", in other words it is sold as a generic TLD, the more so as there are no longer any inhabitants in the territory concerned. All the other African ccTLDs have relatively low volumes but considerable growth (+11%). Africa gained 300,000 names compared with just 200,000 for North America, with very different volumes. Growth of this region remains strong.

Latin America	Stock (	millions)	Var. (%)	Var. (M)
And Caribbean	2021	2022	2022	2022
.BR (Brazil)	4,8	5,0	3,4%	0,2
.CO (Colombia)	3,2	3,4	5,8%	0,2
.MX (Mexico)	1,3	1,3	3,8%	ı
Others	2,1	2,1	1%	_
TOTAL	11,5	11,9	3,7%	0,4

The three leading ccTLDs in the Latin America and Caribbean region are .BR (Brazil) (+3%, compared with +26% in 2021), .CO (Colombia) (+6%, compared with +11% in 2021) and .MX (Mexico) (+4% compared with -5% in 2021). However, the .CO domain is also a "quasi-gTLD" since it is sold as an alternative to the .COM domain (and so far has not obtained the success hoped for compared with the 164 million .COM names). In 2022, the biggest contributions to the region's positive net variation came from the Brazil and .CO domains; the slowdown of the .BR domain being the root cause of that of the region.

Asia-Pacific	Stock (n	nillions)	Var. (%)	Var. (M)
	2021	2022	2022	2022
.CN (China)	20,4	15,1	-26,1%	-5,3
.AU (Australia)	3,4	4,2	22,4%	0,8
.IN (India)	2,6	2,8	7,6%	0,2
.JP (Japan)	1,7	1,7	2,4%	-
.IR (Iran)	1,5	1,5	0,5%	-
.KR (S. Korea)	1,1	1,1	- 1,2%	-
.TW (Taiwan)	1,0	0,6	- 46,8%	-0,5
Others	5,8	6,1	6,2%	0,3
TOTAL	37,5	33,0	- 12%	-4,5

The biggest ccTLD in Asia-Pacific is the .CN domain (China), variations in which, positive or negative depending on the year, turbocharge or greatly depress the performances of the region. The figures for the .CN domain are no longer as reliable as they were, the CNNIC having ceased to publish them regularly. According to our estimates, there were approximately 15 million names in the .CN domain at the end of 2022, as against 20 million at the end of 2021. This loss of 5 million names, the reasons for which we do not know (purge at the registry's initiative, difficult economic situation...?) weighs heavily on the performance of the region.

Without the .CN domain, the Asia-Pacific region would have a positive net balance of around 500,000 names. The other remarkable changes in the region are the gain of 800,000 names by the .AU TLD following the launch of second-level names, and the loss of 500,000 names by the .TW domain, which continues to decline.

Europe	Stock (n	nillions)	Var. (%)	Var. (M)	
TLD > 2M NDD	2021	2022	2022	2022	
.DE (Germany)	17,2	17,4	1,5%	0,2	
.UK (Un. Kingd.)	11,1	11,1	0,1%	-	
.NL (Netherlands)	6,2	6,3	0,9%	0,1	
.RU (Russia)	5,0	4,9	- 1,6%	- 0,1	
.FR (France)	3,9	4,0	2,9%	0,1	
.EU (EU)	3,7	3,7	- 0,2%	-	
.IT (Italy)	3,5	3,5	0,5%	-	
.CH (Switzerland)	2,5	2,5	2,2%	-	
.PL (Poland)	2,6	2,5	- 0,7%	- 0,1	
.ES (Spain)	2,0	2,0	1,2%	-	
Others	17,2	17,5	1,9%	0,3	
TOTAL	74,7	75,4	1,0%	0,7	

Europe is the region with the biggest number of large-volume ccTLDs. Its two leaders are .DE (Germany) and .UK (United Kingdom), both of which have over 10 million domain names. Although its growth is fairly moderate (+1.5%), the .DE domain contributes nearly 30% of the region's net balance, while the .UK domain is at break-even.

Of the ccTLDs with over 2 million names, .FR posted the strongest growth in 2022 (+3%, as against +6% in 2021) followed by the .CH domain (+2.2%).

A new development in 2022 was the loss of stock, albeit marginal, of several of the region's major ccTLDs: -0.2% for .EU, -0.7% for .PL, -1.6% for .RU.

Although many of the European ccTLDs have large volumes of names in stock (which is why we are obliged to present only those with over 2 million names under management), their variations in 2022 were mostly insignificant (fewer than 100,000 names).

#### Breakdown of ccTLDs by volume bracket

The following table shows the distribution by volume bracket of ccTLD domain names in the various parts of the world. We have taken account of all ccTLDs except "pennies" (see

hereunder) and IDNs, breaking them down into the same brackets as the nTLDs (see this section) in order to facilitate comparison.

ccTLDs in IDN (internationalised domain name) format, that is to say in non-ASCII characters, generally have confidential or zero volumes, with the notable exception of the .P $\Phi$  domain (Russian Federation in Cyrillic script) which has several hundred thousand. It is the only IDN ccTLD that we have included in our table.

Volumes	AF	ALAC	AP	EU	AN	Total 2022	% 2022	% 2021
1 million or more	1	3	6	17	2	29	12 %	13 %
500 001 to 1 million	1	2	4	6	-	13	5 %	5 %
100 001 to 500 000	3	3	15	12	-	33	13 %	11 %
50 001 to 100 000	1	-	5	3	-	9	4 %	5 %
25 001 to 50 000	5	5	5	6	-	21	9 %	7%
10 001 to 25 000	7	9	7	3	-	26	11 %	11 %
5 001 to 10 000	15	8	7	3	2	35	14 %	11 %
5 000 or less	24	19	29	8	1	81	33 %	35 %
TOTAL	57	49	78	58	5	247		
%	23%	20%	32%	23%	2%		•	

#### Breakdown of ccTLDs by volume bracket (2022)

This table clearly shows the inequality among regions, with Europe accounting for 50% of ccTLDs with more than one million names (17 out of 29) and only 8% of those with fewer than 5,000 names (8 out of 81).

Although the "million plus" category lost 1 point in weight, the others have remained relatively stable, the 100,001 to 500,000 bracket gaining 2 pp. The median stands at around 10,000 names, with the two least favoured categories (fewer than 10,000 names) weighing 47% in 2022 compared to 46% in 2021 and 48% in 2020. The three most favoured categories (more than 100,000 names) represented 30% of ccTLDs, as against 29% in 2021 and 2020.

Asia-Pacific accounted for 32% of ccTLDs, as against 23% for Africa and Europe, 20% for Latin America and the Caribbean and 2% for North America.

We will come back to the distribution of domain names in the world later in the study with some explanatory elements.

### 4.3 Weight of quasi-TLDs and penny-ccTLDs

To avoid bias due to their high volatility, we have excluded from our global tracking the penny ccTLDs made specific by the aggressive marketing strategies of their registries. But this does not detract from the interest of following this sample over time in view of its rather atypical profile. The penny-ccTLDs identified are .CC (Cocos Islands), .CF (Central African Republic), .GA (Gabon), .GQ (Equatorial Guinea), .ML (Mali), .PW (Palau), and .TK (Tokelau). No others emerged in 2022.

The quasi-gTLDs remain included in the global tracking since their business models are more traditional and do not resort to low-cost strategies. Their originality consists in using country codes for generic purposes. In this study we consider the following domains as quasi-gTLDs: .TV (Tuvalu - "Television"), .ME (Montenegro - "Me / Myself"), .CO (Colombia-"Commercial"), .NU (Niue Island - "New" in Swedish), .IO (British Indian Ocean Territory), and .LA (Laos - "Los Angeles"). We have added .VC (Saint Vincent and the Grenadines - "Venture Capitalist").

If we make a distinction between the three ccTLD segments based on the marketing strategies of their registries, the "true ccTLDs", the "quasi-gTLDs" and the "penny ccTLDs", we obtain the data compiled in the table below.

		2018	2019	2020	2021	2022
	Stock	121,7	127,5	124,9	125,3	122,3
ccTLD	Variation	4,4	5,8	- 2,6	0,4	- 3,0
	Var. (%)	4%	5%	- 2%	0%	-2%
Quasi-gTLD	Stock	4,5	4,6	5,4	6,1	6,3
	Variation	-0,1	0,1	0,8	0,7	0,2
	Var. (%)	-1%	3%	17%	13%	4%
Penny ccTLD	Stock	31,3	48,6	41,2	27,4	34,3
	Variation	6,4	17,3	- 7,4	-13,8	6,9
	Var. (%)	26%	55%	- 15%	-33%	25%
	Stock	157,5	180,6	171,5	158,8	163,0
TOTAL	Variation	10,8	23,1	- 9,2	-13,1	4,2
	Var. (%)	7%	15%	- 5%	-8%	3%

Table: Performance of the different categories of ccTLDs (2018 - 2022)

While "classic" ccTLDs declined slightly overall in 2022 (with the individual variations referred to above), quasi-gTLDs grew by 4% and penny-ccTLDs by 25%.

Penny ccTLDs are found only in Africa and Asia-Pacific, as shown in the table below. The figures indicate that in 2022, the growth dynamic was due above all to the African TLDs.

Data	Stock (millions)			Variatio	ons(%)	Proportions (%)			
« Penny »	2020	2021	2022	2021	2022	2020	2021	2022	21/22
Africa	15,0	20,6	27,1	37%	32%	36 %	75%	79%	+4
Asia-Pacific	26,2	6,8	7,2	-74%	6%	64 %	25%	21%	- 4
TOTAL	41,2	27,4	34,3	-33%	25%				

Table: Performance of penny ccTLDs (2020 - 2022)

According to some sources, some of these registries do not delete names even if they are unused and not renewed, which distorts the figures and provides yet another reason to separate them from the other ccTLDs. This phenomenon is found also with nTLDs, which complicates any analysis made of ongoing trends. As such, the spectacular purge of the .TK domain in 2021 in all likelihood affected names that could have been deleted in previous years. This is a far-reaching adjustment that does not reflect the reality of the current dynamic of the TLD.

We have deliberately taken data at 31 December 2022 in the interests of consistency with other segments. It is important to mention however that as a result of litigation instigated by Meta, Freenom, the registry for the majority of the penny-TLDs referred to, has blocked create operations and carried out mass deletions. At the end of March 2023, subject to confirmation, the .CF domain had apparently "slimmed down" by 76%, the .GA domain by 80%, .GQ by 76%, .ML by 74% and .TK by 18%..

### 5. nTLD

It should be recalled that in many cases the only thing new TLDs have in common is the fact that they are "new"... post-2012. This is not enough to classify them, since this characteristic is disappearing as time goes by (and will disappear definitively at the time of the next ICANN round).

All too often, observers refer to the success or failure of new TLDs without taking time to group them into segments that make sense and allow for a more nuanced approach, criteria for assessing performances being quite different from one segment to another.

That is why, having presented the overall trends in nTLDs, we will study each of these segments in detail in order to gain a better understanding of their dynamics.

## 5.1 Global change in the stock of "new TLDs"

The historic peak in nTLDs reached in March 2017 at around 30 million names, following a period of uninterrupted growth since January 2014, was exceeded in November 2019.

This upward movement was interrupted in 2020 following a high of 35 million names in April/May. The decline accelerated from October with the start of the "purge" of the .ICU domain. At the end of 2020, the number of nTLDs was essentially unchanged from the beginning of the year. It also corresponded to the long-term trend that started in 2014/2015 and was resumed in October 2019 after the dislocations that followed the waves of mass filings in 2016 and early 2017.

2021 was marked by a continued decline in the first half of the year, with a stabilisation over the summer and a rebound in growth from the autumn. This growth continued until the summer of 2022. Since then, the overall stock of nTLD has struggled to surpass 31 million names.

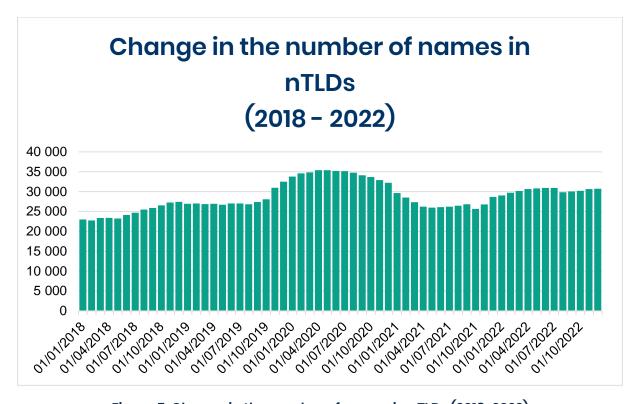


Figure 5: Change in the number of names in nTLDs (2018-2022)

It is important to consider the long-term trend for this segment rendered volatile by period waves of create operations followed the next year by large-scale delete waves: .XYZ in 2015/2016 and .ICU in 2019/2020.

Over the past five years, if we exclude the .ICU phenomenon, the global volume of nTLD has moved in the range of 25,000 to 30,000 with a slightly positive trend. The current situation is that of a plateau caused by the expiry of the names created between the summer of 2021 and the summer of 2022. This in turn is what allows for the possibility that this segment will resume its growth in the second half of 2023.

However, these observations are rough approximations, considering nTLDs as a homogeneous whole, which they are not. An analytical grid taking account of the models and specific features of nTLDs is therefore essential in order to understand what is going on.

## 5.2 Definition of "new TLD" "segments"

We have created different segments corresponding to the most frequent approaches in specialist circles. Since these TLDs are still relatively young, the uses made of them may lead to revisions of this segmentation, which is still very much geared to the nature of the TLDs and their conditions of eligibility:

- Community: domain name filings reserved to members of a community, use being community-centric.
- Geographic: nTLDs of a geographical character designating a city or region.
- Generic: nTLDs consisting of generic terms.
- Brands: TLDs corresponding in general to flagship brands, registered by private entities for internal use or extended to their customers and partners.
- "Open" brands: TLDs corresponding to brands, registered by businesses owning
  these brands and open to holders other than the business, its subsidiaries or
  partners. These TLDs are few in number (two after revision of the list in 2021: .CPA
  and .OVH) but the volumes registered make this a fully-fledged segment,
  comparable with that of generic TLDs.

Our nTLD segmentation attempts to reflect the purpose of TLDs rather than their ICANN status, since these are difficult to classify and have sometimes been adopted for tactical reasons (such as to obtain the privileges granted to Community nTLDs). There is currently no "official" nTLD nomenclature, so our segmentation is subject to change based on information made public by the registries or ICANN.

An additional complicating factor is the degree of restriction required by each registry.

Access to a .BRAND domain can be relatively "open" (if the only condition to be met is, for example, being a client of the delegatee) while the registration of a Generic TLD may also

be subject to conditions. https://ntldstats.com, which proposes a nomenclature, relies on a framework that ranges from "Unrestricted" through "Semi-restricted" and "Brand" to "Restricted". However, while this approach may explain the volumes (or their absence) by reference to eligibility conditions, it tells us nothing about the purpose and the marketing positioning of nTLDs.

#### The . Brands converted in 2019 – 2022

Moreover, since 2019, some nTLDs that were originally .BRANDS were altered in nature to become generic TLDs. Below is the list of those we have had to reclassify, subject to modifications if new information comes to our attention:

	nTLD	Former segment	New segment
2019	.BOND, .COMPARE, .MONSTER, .SELECT	.CORP	Generics
2020	.BEAUTY, .CYOU, .HAIR, .MAKEUP, .QUEST, .SKIN	.CORP	Generics
2021	.BOX, .SBS	.CORP	Generics
2022	.GIVING	.CORP	Generics

Change of segment of nTLDs (2019 - 2022)

Certain players have developed a speciality in buying .BRAND domains unused since creation from major groups. The "lines" dividing the segments therefore continue to shift, proving that this market is alive and well.

## 5.3 Performances of "new TLD" "segments"

The differences in dynamics observed for each of our segments show that the typology used is relevant today. But this remains changeable. nTLD families will no doubt continue to refine in the future, requiring periodic revisions of the classification of these TLDs in order to keep as close as possible to market realities.

	Stocks (thousands)				Create operations (thousands)			Retention	
	2021	2022	Var. abs	Var.	2021	2022	Var.	M. 2022	% M. 2022
Generic	27 568	26 649	2 081	8%	15 629	16 714	7%	12 935	47%
Geographic	961	947	- 14	- 1%	329	125	-62%	822	86%
Open brands	71	71	-	- 1%	38	13	-66%	58	81%
Community	45	44	- 1	- 2%	2	9	268%	35	78%
Brands	34	38	4	12%	5	6	15%	32	94%
TOTAL	28 679	30 748	2 069	7%	16 004	16 867	5%	13 881	48%

#### Performance of nTLD segments (2021 - 2022)

Generic TLDs gained 2,081,000 names in stock, representing an increase of 8% and explaining the positive variation of the nTLDs. Generic TLDs also saw their create operations increase by 7% in 2022 (1.1 million names) with a very high creation rate (63% compared with 57% in 2021). Their retention rate increased appreciably (to 47% from 38% in 2021), showing that the purge of the .ICU domain is now a thing of the past. Below we will examine the individual performance of some of the generic TLD leaders.

Geographic TLDs lost 1% in stock, with a sharp reduction (-62%) in create operations following the surge in 2021. The retention rate rose to 86% compared with 74% in 2021, a counter-intuitive development following a wave of create operations. The creation rate fell to 13% (125/947), which is low.

Open .BRANDs evolved in comparable fashion, with a very sharp fall (-66%) in create operations and a much improved retention rate (81% compared with 50%).

Community TLDs lost 2% in stock and saw their create operations increase fourfold, while their retention rate went from 75% to 78%. Their creation rate returned to "normal" levels, going from 4% to 20%.

Lastly, .BRANDs posted 12% stock growth and a 15% increase in create operations. Their retention rate, which was already very high (91%), rose to 94% in 2022, but their creation rate (16%) remained weak.

Variations in the performances of different segments are often erratic and difficult to foresee. In time, the anomalies created by the waves of creations and deletions should be increasingly absorbed by the volumes of stocks, but this is still some way off.

#### Change in the number of TLDs in each segment

The table below shows the change in the number of TLDs in each segment over the past five years.

	Number in				Variations (net balance)				
	2018	2019	2020	2021	2022	2019	2020	2021	2022
Community	12	12	12	12	12	-	-	-	-
Geographic	63	62	62	62	61	- 1	-	-	- 1
Generic	511	517	524	526	528	+6	+7	+ 2	+ 2
Brands	622	594	573	554	549	- 28	- 21	- 19	- 5
Open brands	1	2	2	2	2	+1	-	-	-
TOTAL	1209	1187	1173	1156	1152	- 22	- 14	- 17	- 4

#### Change in the number of nTLDs per segment (2018 - 2022)

After the years 2014-2016, which saw the creation and activation of most of the nTLDs (+465, +352 and +313), 2017 and 2018 were marked by the first delete operations, generally of .BRAND domains abandoned by their holders. This phenomenon continued in 2020 with the loss of 21 .BRAND domains, six of which converted to generic TLDs, and in 2021 with the loss of 19 .BRAND domains, two of which converted to generic TLDs. The figures for 2022 are lower: five .BRAND domains lost, of which one converted to generic TLD (.GIVING), and one deletion of a geographic TLD (.BUDAPEST). The second generic TLD added was a creation (.KIDS).

Deletions of .BRAND domains follow the logic of their delegatees: reorientations in the digital strategies of the groups concerned, changes of flagship brands making the .BRAND domains concerned obsolete, or simply defensive create operations from the outset, which their delegatees are unwilling to continue to pay for since they are at a loss as to what use to make of them. The notion of "commercial failure" is not relevant to this "private" segment.

The trend in conversions from .BRAND to generic TLDs is likely to continue, for two reasons:

- on the one hand, the proportion of .BRAND names still not used is fairly large, which
  offers prospects of acquisition/reconversion for a certain number, while others will
  be simply abandoned;
- and on the other hand, a significant percentage of generic TLDs have stocks of insufficient volume to ensure the economic viability of their registries, which spurs the latter to practise external growth strategies by buying the nTLDs available for sale.

## 5.4 Distribution of new TLDs in volumes of domain name registrations

The distribution in volume of domain name registrations does not reflect the number of TLDs in each segment, as shown in the two figures below. With 526 TLDs (46% of the total), generic TLDs represent 96% of domain name registrations; with 555 TLDs (48% of the total). BRAND domains represent only a marginal percentage of names registered.

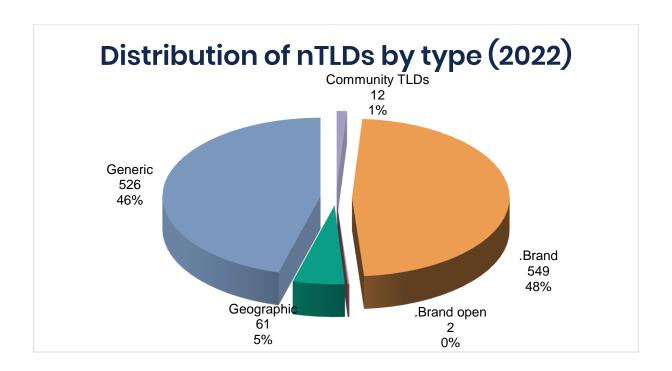
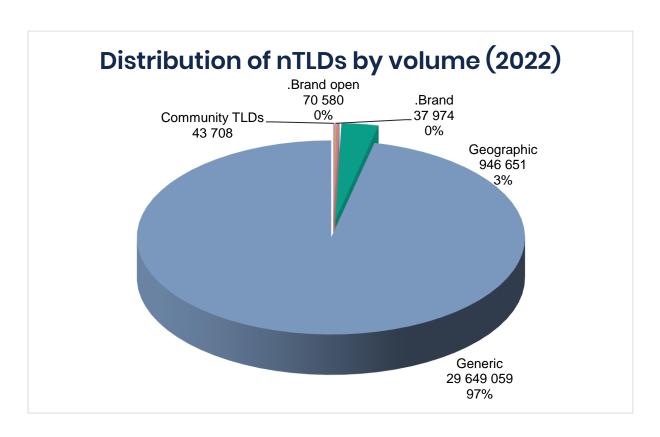


Figure 6: Distribution of nTLDs by type (2022)



The graph below shows the breakdown of nTLDs by volume range. We can see that the "Fewer than 5,000 names" represent more than 70% of the total, while the "More than 500,000" represent only 1%. These proportions have not varied appreciably since 2014, but

even so we note a gradually reducing trend in the "Fewer than 5,000 names" portion and a regular increase in the brackets between 5,001 and 25,000 names.

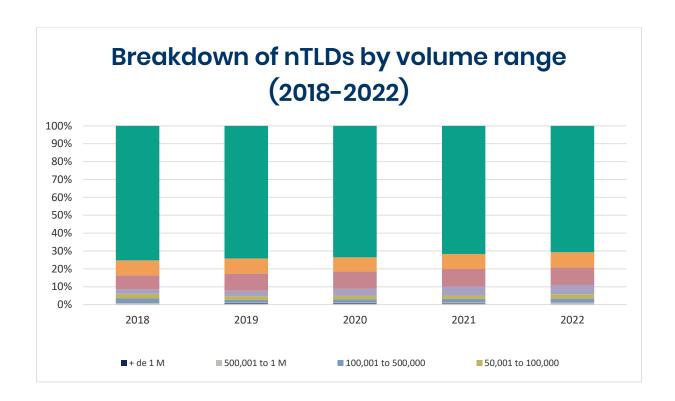


Figure 8: Breakdown of nTLDs by volume range (2018-2022)

If we take into account ICANN's fees (\$25,000 minimum fixed cost) and the various costs related to the management of a TLD (staff, back-end operator, promotion, etc.) and we deduct a minimum average budget of \$100,000 a year, it can be seen that the break-even point for a TLD marketing its domain names at around \$20 is 5,000 names (10,000 for a \$10 fee close to that of .COM). It is therefore essential to analyse the distribution of nTLDs by type and by volume bracket in order to evaluate the health of this segment.

Volumes	СОММ	GEO	GEN	OBR	CORP	Total	%	2020
1 million or more	-	_	5	-	-	5	0 %	1%
500,001 to 1 million	-	_	8	-	-	8	1%	1%
100,001 to 500,000	-	2	23	-	-	25	2 %	2 %
50,001 to 100,000	-	1	26	1	ı	28	2 %	2 %
25,001 to 50,000	1	3	56	-	ı	60	5 %	5 %
10,001 to 25,000	-	16	96	-	ı	113	10 %	10 %
5,001 to 10,000	-	13	82	1	2	98	9 %	8 %
5,000 or fewer	11	25	232	-	547	815	71 %	72 %
TOTAL	12	61	528	2	549	1152		
% < 10,000 names	92 %	62 %	59 %	50 %	100%	79 %		
% < 2020 reminder	92 %	63 %	61 %	0 %	100%	80 %		

#### Breakdown of nTLDs by type and by volume range at 31 December 2022

Excluding .BRAND names which obey very different forms of logic and objectives, we obtain 268 TLDs of fewer than 5,000 names (or 44% of the TLDs excluding .BRAND compared with 50% in 2018) and 364 TLDs with fewer than 10,000 names (60% of the TLDs excluding .BRAND, compared with 66% in 2018).

The situation has therefore improved over time, but if we take 5,000 names as the "survival threshold", just over half of nTLDs excluding .BRAND remain financially fragile. This is what lies behind the move towards concentration, particularly marked by the constitution of large portfolios such as that of Identity Digital.

On the one hand we have the smaller registries which find it difficult to make ends meet, and on the other holders of large portfolios of nTLDs who can make use of economies of scale to significantly bring down operating costs. One of the keys to success in this highly fragmented segment seems to be to hold a few large nTLDs, or to hold many small ones – two strategies referred to by the Chairman and CEO of Radix who asserted that he had chosen the former, whereas Donuts had opted for the latter.

The pressure on costs (ICANN and others) will continue to intensify as time goes by.

Registries are placed in a particularly uncomfortable situation, because they cannot

develop their TLDs without the requisite means, but these expenses may strangle them quite quickly in case of failure of promotional campaigns.

Some have engaged in recent years in low-cost strategies that translate into exceptional volumes for such "young" top-level domains. But "selling" a million domain names for one cent each really only generates \$10,000, which is one-tenth of the annual budget we took as a working hypothesis, or the equivalent of 1,000 names sold for \$10 each.

High volumes can therefore be indicators of success, but also the reflection of particularly "kite-flying" strategies based on the assumption that holders attracted by very low prices at the time of creation will agree to renew their names at more "normal" prices in the following years. The case of .ICU, with its 3% renewal rate in 2021 is an almost exaggerated illustration of this phenomenon.

These elements should encourage ICANN to rethink its pricing policy on registries of new TLDs, especially with regard to a second round. For most nTLDs apart from .BRANDs, its fixed annual fees of US\$25,000 constitute too heavy a burden, which prevents them from developing and sometimes even causes them to suffocate, forming a barrier to entry benefiting incumbents.

### 5.5 Change in retention rates per segment

Retention rates are a key element for analysing the success of a TLD and its chances of lasting, the more so as a growing number of nTLDs rely on this parameter more than on their create operations to ensure their survival.

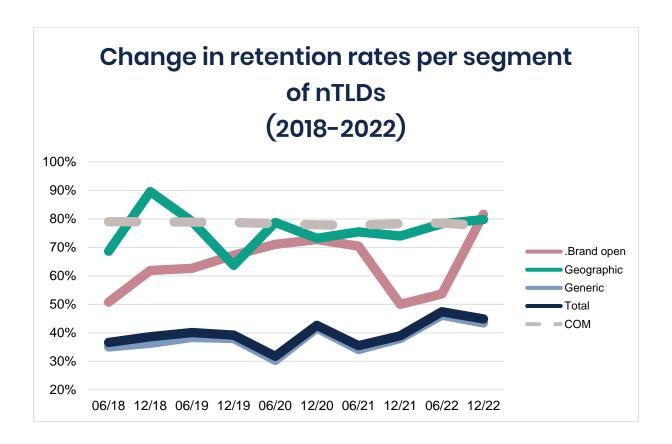


Figure 9: Change in retention rates per segment of nTLDs (2018-2022)

(The .COM rate is added as a comparison).

Unsurprisingly, we see that the generic TLDs have the lowest rate, improving in 2022 (47% compared with 38% in 2021, 43% in 2020 and 39% in 2019). But this rate is only an average, which fluctuates significantly.

The rate of open .BRAND domains recovered in 2022 (81% compared with 50% in 2021 and just over 70% in 2020).

The geographic TLDs went from 75% to 86%, tending to stabilise.

The .BRAND domains (not included in the graph because of anomalies in ICANN data for 2020) had a retention rate of 94% in 2022 as against 91% in 2021.

## 5.6 The "penny nTLD" phenomenon"

This phenomenon also exists in the nTLDs, and for 2022 we have repeated the study carried out since 2019 to try to isolate those of the nTLDs that best match this profile. The objective is to continue to quantify the phenomenon (how many nTLDs, what proportion of names registered with nTLDs) but also to see whether the composition of this category is stable over time or whether it varies from one year to the next.

The characteristics of these TLDs are well known: after one year, the high volumes of creations resulting from low or symbolic prices translate into high volumes of deletions, either because renewal charges are much higher than creation charges or because holders who registered large numbers of "almost-free" names have not achieved their goals (sales or monetisation of traffic) and let them lapse when they expire.

#### How to identify them among the nTLDs?

The methodology used consists in selecting the generic nTLDs with at least four years of activity at 31 December 2022 (launched before 31 December 2018 and still in existence at 31 December 2022) so as to avoid as far as possible the "side effects" associated with the opening phases, which usually see high creation rates combined with rather low retention rates in the following year.

This approach also excludes .BRAND domain names, which follow specific dynamics.

In order not to have data biased by TLDs with only a few names in stock and with no commercial activity, we have also eliminated from our sample group all TLDs whose stock was fewer than 200 names at 31 December 2018. Some of them have since seen successful launches, but still too recent to be able to be taken into account without the risk of distorting the results.

The usual life cycle of a TLD sees its creation rate decrease as stock increases and the retention rate increase in line with how long ago the names were registered. These values

will stabilise after a certain time if no isolated incidents (promotional campaigns, waves of "domaining", etc.) occur to disrupt them.

The pertinent thresholds for classifying the situation of a TLD were defined by the quantitative analysis carried out in 2019 of all the nTLDs meeting our criteria. We have retained them in 2022 so as to allow comparisons over time.

#### 5.6.1 Retention rate

The analysis of retention rates of nTLDs in our sample allows us to obtain the following table.

This grid can allow any registry to compare itself as regards TLDs of the same type, while positioning their category of nTLD relative to the whole. Thus, 83% of geographic TLDs (45/54) have a retention rate of 76% or more, as against 51% for of generic TLDs (225/441) (and this taking account only of the TLDs themselves, not of the volume of domain names registered in each of them).

Rate brackets	СОММ	Geo	GEN	OBR	Total	% 2022	% 2021
86% and over	3	31	71	-	105	21%	18%
76% to 85 %	3	14	154	1	172	34%	44%
66% to 75 %	1	5	139	ı	145	29%	21%
51%to 65 %	-	2	46	ı	48	10%	11%
50% or less	_	2	31	ı	33	7%	6%
	7	54	441	1	503		

Breakdown of generic TLDs (Legacy and nTLDs) by Retention Rate nTLDs excluding .BRAND having had more than 200 names in stock at 31/12/18

The overall evolution of the retention rate – a very positive factor for attesting to the effective development of nTLDs – is reflected in the weightings of the different rate brackets. But the indicator fell in 2022, with 55% of nTLDs placed between 76% and 100% as

against 62% in 2021, 47% in 2020 and 43% in 2019. This is perhaps the result of deletions linked to the uptick in creations from summer 2021 to summer 2022.

The thresholds are consistent with what we had already observed with ccTLDs. For example, the retention rate for the .FR TLD, which is an old TLD, well established in its market, varies from time to time between 81% and 84%.

What keys to interpretation can we contribute?

Above the 86% threshold we find TLDs with a high proportion of used and/or defensive names that are renewed on a regular basis and registries whose policies are not to delete anything.

The TLDs between 76% and 85% are well established within their respective fields of activity, with high usage and holder loyalty rates. This is the category that suffered most in 2022, after posting the best advance in 2021.

Between 66% and 75%, TLDs struggle to stabilise their holder base. In principle this stage is transitional, on the way up to the next category, as happened in 2021, with the weight of this category falling from 33% to 21%, but in 2022 we see a reversal, from 21% to 29%. So some nTLDs that had managed to hold on to their names in 2021 lost them in 2022, but a detailed study would be required to pinpoint the causes of this phenomenon.

The same observation can be made, a little more severely, for TLDs in the 51% to 65% bracket. This situation is generally the result of dynamic marketing strategies focusing on new creations to the detriment of building loyalty (among ccTLDs, the .PL (Poland) domain has long been an example of this). This category held steady in 2022, losing just one percentage point.

Finally, below the 50% renewal threshold, we find a small proportion of TLDs that may either be experiencing major setbacks by simply losing customers or have implemented very aggressive marketing strategies that have ultimately resulted in significant deletions. This category gained one point in 2022.

Our penny nTLDs are among the 33 TLDs of this last category (32 in 2021).

#### 5.6.2 Creation rate

In the grid below, the most dynamic TLDs have a high creation rate, while the TLDs attracting the fewest new creations have a low creation rate. The creation rate measures the inflow of new domain names to the stock. This rate is 100% at the time a TLD is created and 0% if it has registered no names in the past year.

Rate brackets	СОММ	Geo	GEN	OBR	Total	% 2022	% 2021
51% and more	-	1	39	-	40	8%	8%
36% to 50%	-	1	70	-	71	14%	23%
26% to 35	1	4	157	-	162	32%	29%
16% to 25%	5	12	117	1	135	27%	21%
15% or less	1	36	58	-	95	19%	17%
TOTAL	7	54	441	1	503		

## Breakdown of generic TLDs (Legacy and nTLDs) by Creation Rate nTLDs excluding .BRAND having had more than 200 names in stock at 31/12/18

The "normal" (cruising speed) value can be considered to fall within the 16% to 25% bracket, with the 15% and less category concerning TLDs that are at risk of suffocation due to a lack of sufficient demand. This last category also advanced slightly in 2022 (+2 percentage points) but it was above all the 16% to 25% bracket that gained ground (+6 pp), reflecting the general settling of create operations that is very visible for the 36% to 50% category (-9 pp).

Creation rates of over 51% mean that more than 1 name in 2 has been registered over the course of the past 12 months in a given portfolio and at a given date. This rate is typical of a classic scenario in the two years following a market launch and is highly indicative of

aggressive promotional strategies if sustained for over three years. The other two categories (26% to 35% and 36% to 50%) contain TLDs that have conducted successful and/or sufficiently recent marketing campaigns to have a significant proportion of newly created names in their portfolio.

Our penny nTLDs are therefore among the 40 domains (43 in 2021) with a creation rate of over 51%.

#### 5.6.3 Identification of penny nTLDs in 2022

Low-cost TLDs are among those with a very high creation rate (51% and over) combined with a very low retention rate (50% and less). The table hereunder shows the distribution of the nTLDs studied by brackets of creation and retention rates, all segments together (except .BRAND).

R rate / Cr. Rate	15% and less	16- 25%	26-35%	36- 50%	51% and +	Total	% 2022	% 2021
86 % and more	66	19	9	5	6	105	21%	16%
76 % to 85 %	23	74	60	10	5	172	34%	44%
66 % to 75 %	4	32	75	27	7	145	29%	21%
51 % to 65 %	2	4	14	22	6	48	10%	11%
50 % and less	3	3	4	7	16	33	7%	6%
TOTAL	98	132	162	71	40	503		
%	19%	26%	32%	14%	8%		•	
% 2021	17%	21%	29%	23%	8%			

Breakdown of generic TLDs (Legacy and nTLDs) by Creation Rate

nTLDs excluding .BRAND having had more than 200 names in stock at 31/12/18

X-axis: Creation Rate; Y-axis: Retention Rate

This breakdown shows that irrespective of the aspects linked to the profitability threshold, the proportion of TLDs in a truly critical situation is negligible.

We may consider a situation critical when the Creation Rate is 15% or less and the Retention Rate is 50% or less. Only three TLDs meet this dual requirement (as against one in 2021, three in 2020 and seven in 2019).

We also see an interesting visual phenomenon, observed since 2019: for each bracket of Retention Rates there is a "favoured" Creation Rate, and vice versa (the highest number of each line or column, respectively, in bold). These intersections form a diagonal which highlights the strong correlation between the Creation and Retention rates. It seems that there is a "normal" profile corresponding to each strategy and that nTLDs decrease in number as they move away from this profile. This grid can allow registries to evaluate their performances and situation compared with their plans or expectations.

Above this diagonal line, the TLD is outperforming on one or other of the criteria, or both; below it, it is underperforming. A registry (and even a registrar if it takes account of inward and outward transfers) can thus assess the effectiveness of its strategy depending on the internal causes leading to these results. By crossing-referencing this matrix with those

detailing the breakdowns by type of TLD (geographic, generic, etc.), it is possible to form a fairly accurate idea of the strategic position of a domain or of an actor.

In 2021, the higher creation rates shifted the lines, such that the maximum values of the 66% to 75% and 76% to 85% lines were no longer in the "diagonal". This shift remains visible in 2022, but in more attenuated form (values of 27 and 60). If everything goes "normally", 2023 performances will be well aligned on the diagonal.

#### View of volumes of names concerned

What are the volumes of names concerned by each category?

The following table is exactly the same as the previous one except that it expresses the nTLDs in volumes of names registered (thousands):

R. rate / Cr. rate	15% and less	16- 25%	26-35%	36- 50%	51% and +	Total	% 2022	% 2021
86 % and more	738	148	31	59	111	1087	4%	4%
76 % to 85 %	307	1 161	838	158	102	2 567	9%	11%
66 % to 75 %	31	502	1635	929	305	3 401	12%	10%
51 % to 65 %	25	39	198	1284	2 274	3 820	13%	12%
50 % and less	80	26	852	1773	15 251	17 982	62%	62%
TOTAL	1 181	1876	3 554	4 203	18 043	28 857		
%	4%	7%	12%	15%	63%		-	
% 2021	4%	4%	12%	13%	67%			

Breakdown of generic TLDs (nTLDs excluding Legacy) by creation rate nTLDs excluding .BRAND having had more than 200 names in stock at 31/12/18

X-axis: Creation Rate; Y-axis: Retention Rate

The total number of names shown as registered here is 29 million, compared with a grand total of 31 million nTLDs. The difference is due to the nTLDs omitted because they were .BRAND and/or they had less than four years' activity.

Again we see the "diagonal" described above, slightly more biased at the 51% to 65% level in retention rates. The volume of domain names in critical situations from a strategic point of view represents 80,000 domain names (compared with 1,000 in 2021). As for the category mentioned above as being likely to see an adjustment in 2022, it concerns 2.3 million names, 8% of the total.

Unsurprisingly, the penny-TLD category is the one with the biggest number of names: 15 million in 2022 compared with 16 million in 2021 and 15 million in 2020, or 53% of the names filed in the selected nTLDs (62% in 2021, 60% in 2020), and 50% of the total number of names filed in nTLDs.

This implies that roughly at least 26% (53% x 50% retention rate) (as against 27% in 2021 and 25% in 2020) of the names filed in nTLD are likely to disappear in 2022, all other things being equal.

This simple calculation highlights one of the reasons behind the persistent volatility of nTLDs, which can vary by several million in either direction in the space of just a few months. These significant variations are determined by just a handful of TLDs, which our study has allowed us to isolate.

Outwardly, the number of nTLDs that can be classed as penny TLDs changes little – 16 in 2022 compared with 24 in 2021, 21 in 2020 and 20 in 2019. But they are not always the same TLDs.

BUSINESS	LIVE	SITE	WEBSITE
CLUB	ONLINE	SPACE	WEDDING
GDN	000	STORE	WORK
HOST	PRESS	TECH	XYZ
KIM	SHOP	TOP	xn3bst00m .集团

List of nTLDs that could be considered as penny TLDs in 2019

ACCOUNTANT	INK	ONLINE	TOKYO	WORLD
BID	KIM	PRESS	UNO	
CASA	LIFE	RECIPES	VIP	
DEGREE	LINK	RED	VOTING	
FEEDBACK	LTDA	STORE	WEDDING	

#### List of nTLDs that could be considered as penny TLDs in 2020

BAR	FIT	ONLINE	SITE	UNO
BUZZ	FUN	OVH	SPACE	WEBSITE
CAM	HOST	PRESS	STORE	WORK
CASA	ICU	REST	ТОКҮО	XYZ
CLUB	LINK	SHOP	TOP	

#### List of nTLDs that could be considered as penny TLDs in 2021

BAR	ICU	SPACE	XYZ
BEST	ONLINE	STORE	
CAM	REST	TOP	
FUN	SHOP	UNO	
HOST	SITE	WEBSITE	

#### List of nTLDs that could be considered as penny TLDs in 2022

A comparison of the lists shows that it is impossible to classify an nTLD definitively as a "penny-TLD", and that the category is intrinsically highly volatile.

From 2019 to 2022, only two nTLDs were classified as "penny-nTLDs" in all four years: .ONLINE, and .STORE. Nine others were classified in three of the four years of our study: .HOST, .PRESS, .SHOP, .SITE, .SPACE, .TOP, .UNO, .WEBSITE, .XYZ

This classification is clearly not static as it evolves according to the strategies adopted by the players concerned and the natural constraints imposed by both the market and the life cycle of the domain names.

This being the case, a growing TLD will automatically find it increasingly difficult to maintain a high creation rate. Likewise, an increasing retention rate for a TLD that is achieving zero growth or is even in decline can only reflect the fact that there are very few new creations and that the stock is based increasingly on names that have been used and/or defensively registered in the past, which is not necessarily a good sign. It all revolves around balance and the context in which the TLD is operated.

The main issue for new registries is often that of the volume of names managed, which, where third parties (and indeed investors!) are concerned, is indicative of a domain's success. After a few years, however, these same registries realise that the true key to success is the profitability of their activity.

It is for this reason that we considered it useful to maintain in this 2022 edition a few reflections on the business models of the nTLDs, for the attention of both current registries and those envisaging applying in future ICANN rounds.

# 5.7 Reflections on the business models of the nTLDs

There is a degree of confusion surrounding talk of "new TLDs". Some commentators sound an optimistic note, while others churn out only bad news. How can we know who is right? The objective of this section is to lay the bases for a reflection on the dynamics and constraints inherent in each business model, and to put forward a few keys to understanding that seem to us pertinent at the present time.

A secondary objective is to show that the key success factors of these different types of TLDs – factors likely to ensure their long-term survival – are not entirely based on volume, at least for some of them. It is only for the "merchant" nTLDs, whose durability relies on selling domain names to third parties, that the notion of volume has any real meaning. The

success of a TLD in fact depends more on its ability to unlock value for its registry and the target online community, and the way this value is measured differs from one segment to another.

On the other hand, the costs are the same for all registries, and this burning topic cannot be ignored, since it is far from being neutral: on top of the back-end operator's charges, the US\$25,000 a year demanded by ICANN (for nTLDs with fewer than 50,000 names in stock) represents a rather heavy burden.

As already mentioned above, for a commercial TLD with 5,000 names in stock, these ICANN fees are equivalent to a \$5 fixed cost per domain name. If we add the back-end operator's charges, these internal operating costs and the promotional and development expenses, we see straight away that such registries are forced to charge high, relatively uncompetitive rates compared with those of major competitors already solidly entrenched in the market, enjoying the double advantage of volume and user acceptance.

#### 5.7.1 Unequal business models

Not all new TLDs are equal as regards business models. Let us consider each of the major segments or "families" existing at present.

• .BRAND TLDs are created by major groups for their own use. Their benefits are expressed in terms of contribution to their owners' digital strategies. Expected volumes are low and the cost per domain name is therefore high, albeit compensated for by the added value created for the business. Use is internal so the notion of "tariff" does not apply, and profitability has to be addressed in the context of a major group. While substantial for a start-up business, the budget needed to obtain a domain and make it work is fairly modest relative to the investments made to establish and develop the online presence of a major group and its components, not to mention the budgets linked to communication.

- "Open" .BRAND names are .BRAND names that can be registered by third parties subject to certain conditions. So far cases are few and far between so we do not have the necessary perspective to be able to assess the dynamics of this segment. For the moment, the salient point is that most of these TLDs attract significant, and in some cases very significant volumes, which means they resemble generic TLDs more than .BRANDs.
- "Community" TLDs are reserved to targeted communities, which by their very nature are fairly limited. Expected volumes are therefore rather low, sometimes reaching "average" for large communities or if the TLD is universally acclaimed. In order to balance their accounts, these TLDs are forced to sell their domain names at high prices, but which can become moderate if successful.
- "Geo" TLDs correspond to names of regions or cities. Their catchment areas are often greater than those of Community TLDs, while targeting relatively small audiences. Their problem, though, is very similar to that of the Community TLDS, although less severe. Their spectrum is broader, ranging from a few thousand domain names to several hundreds of thousands in the long run. But initially and for several years, volumes remain low or average and prices must be aligned accordingly, from high to moderate. However, volume-specific prices allow these players to expect a quick return on their investments, with renewal rates generally high and create operations growing as the reputation of the TLDs increases.

The last segment, that of the "pure generics", is split into two:

generic domains that can only reach a small customer base, either because of
their eligibility rules or because of a key term that can only interest restricted
audiences and niche markets. The financial logic of these nTLDs is close to that of
geoTLDs and Community TLDs, the expected volumes being low or average and
the tariffs consequently high or moderate. There is so far no example of these

domains having acquired a sufficient volume to arrive at moderate tariffs while assuring their profitability, but this will probably come about in the future.

• "open" generics, in terms used worldwide, which are lucky enough to address a global target or at least one that is very broad. These TLDs can afford to forget about approaches targeting niche markets at relatively high prices and adopt mass sales and low-cost strategies. The wager is all the more risky in that the TLDs are still new, which is no doubt also why they are the only ones to envisage it. Here volumes can range from "Weak" to "Strong" and tariffs from "Low" to "High" depending on registries' choices and success rates.

	Envisaged tariff levels					
Expected volume	N. A.	Low	Moderate	High		
Strong	-	[GEO] GEN-broad Open .BRAND	-	-		
Average	-	-	GEO [COMMUNITY] [GEN - limited] GEN - broad Open . BRAND	-		
Low	.BRAND	-	-	COMMUNITY GEO GEN - limited GEN - broad Open .BRAND		

Square brackets [] indicate situations that are atypical or unlikely to be encountered at present.

This succinct modelling of the balances between expected volumes and tariff levels allows us to explore the consequences for registries in terms of marketing strategies.

#### 5.7.2 The consequences in terms of marketing strategies

Due to the particularities of each, the nTLDs are not evenly matched and have to develop marketing strategies to suit their strengths and weaknesses.

The lower the expected volumes, with high tariffs, the more the registry is forced to look to the added value of its TLD and/or the sentiments it may be able to arouse among its target audience. BRAND names will therefore seek added value linked to their digital strategy. COMMUNITY and GEO domains can convey notions of belonging and recognition between their owners and their visitors or prospects. In numerous cases, this will concern "love-TLDs", which owners are prepared to pay more for because they make particular sense in their view, for reasons that are most often sentimental and linked to identity, such as belonging to a city, region or community. Restricted generic TLDs may seek to develop original service models that provide them with the key success factors they may have initially lacked.

Conversely, the "pure generic TLDs" will be able to charge low tariffs, and even wager on TLDs that are virtually free of charge, hoping that the proportion (generally very low) of renewed names will eventually enable them to balance the books. Renewal rates are all the more critical for TLDs that have chosen a virtually free approach for create operations, hoping to make up their losses with renewal rates. So far these innovative models have achieved tangible results in terms of volumes in the short term, but without guaranteeing the long-term sustainability of the TLDs concerned.

#### 5.7.3 Exclusive TLDs versus mass TLDs

These are two philosophies that coexist without ever coming together: the successful "love-TLDs" tend to claim to be exclusive or selective, while the "mass-TLDs" in contrast seek the widest range of targets possible.

Both approaches, however, are exposed to miscalculation. Users attracted by a "love-TLD" can be put off by conditions of eligibility that are too drastic, making the TLD cumbersome (checks, etc.) and all the more dissuasive in that their selective nature does not necessarily engender feelings of attachment or any perception of added value. "Mass-TLDs", on the other hand, by their construction, suffer from significant volatility and must maintain high levels of create operations if they do not want to see their stocks collapse. This strategy can end up looking like a Ponzi operation if it escapes the control of the registry.

The logical result is that, since 2018, we have been witnessing the changes expected among some of the registries, with "love-TLDs" disappointed by the volumes seeking to ease their eligibility conditions, and some "mass-TLDs", after having their fingers burnt by their disastrous renewal rates, paradoxically revising their prices upwards.

#### 5.7.4 Bad pricing never pays

This remark is not gratuitous: it should be remembered by future applicants for TLDs in the coming years, when ICANN organises the next rounds.

In a world as competitive as that of domain names, bad pricing can lead a registry to ruin simply because the tariff turns out to be dissuasive (negative effect on volumes) or dilutive (negative effect on the perception of value).

Registrars and users alike are very hostile to rate increases, so it is probably best for a low-to-moderate TLD to start with reasonable rates and allow for the possibility of downward adjustments, as volumes increase.

#### 5.7.5 Right holders and domainers, two false friends

A fairly large number of new top-level domains have built their short-term models on the hope of reaching two particularly promising markets: rights holders and domainers.

Anxious to protect their brands against cybersquatting, rights holders have long been a cash cow in the domain name market. The "sunrise period" which is designed to allow them to protect their names has sometimes even been transformed into something not far short of racketeering, organised by registries more or less created for this purpose. But the rights holders have often been very disappointing. Once they are conscious of the fact that they can no longer eliminate the risk, they increasingly content themselves with managing it and no longer take part in sunrise periods with the same enthusiasm (or the same anxiety) as before. Similarly, their defensive domain registration strategies have become increasingly parsimonious. The abundance of TLDs has helped kill the golden calf.

The domainers for their part have also been sources of disappointment for some registries. Many refuse to take the risk of investing in TLDs of questionable longevity, or which are so poorly known to the public that the chances of reselling them with a profit are slim. The policy of "premium" names sold by auction or billed more expensively has also sometimes proven fruitless, because domainers cannot afford to invest much in a single name, and the more "natural" holders are not sufficiently aware of the potential returns to accept the level of expenditure required.

#### 5.7.6 Convincing investors

All these considerations are important for applicants wishing to obtain a TLD (and for those who already have one!) vis-à-vis their investors or principals. It is important to understand the situation of each TLD profile in order to adjust the business model and the marketing strategy accordingly, and not to make "false promises" to backers, even in good faith.

The first precaution to take is to explain to them that volume alone is not an absolute criterion of success.

## 5.7.7 Success or failure is linked not to volume but to the pertinence of the strategy with respect to market conditions

Volume is only the tip of the iceberg – certainly the most visible, but perhaps not the most relevant. A TLD that achieves profitability with low volumes but which reaches its targets and wins their loyalty will logically be more sustainable than a TLD with high volumes but which is unprofitable and has to base its development on permanently gaining new customers to compensate for a very low renewal rate.

Even if the domain name market sometimes presents absurd situations, the principle of reality always wins over in the end. The first ICANN round resulted in a proliferation of projects that were sometimes brilliant, but often unrealistic in terms of expectations and disconnect among targets, eligibility conditions, business models and marketing

strategies. It is to be hoped that applicants in the next round will do a better job of linking these various parameters so as to give their entrepreneurial venture the best chance of success.

## 5.8 "Leaders" still fragile

Having looked at the dynamics at work in the nTLD segment, it is interesting to study in more detail the performances of the leaders, since their variations largely determine those of the segment as a whole.

These leaders were of necessity selected on the basis of volume: the reference sample group includes all nTLDs with 500,000 or more domain names in stock at 31 December 2021 and/or 31 December 2022.

Certain leaders of years past have seen their stocks evaporate and can no longer be considered leaders. They thus vanish if they do not meet our criteria.

As the table below shows, these "leaders" are largely TLDs marketed using aggressive or low-cost marketing strategies, which explains why some of them have collapsed after surpassing 500,000 names. These cases are interesting to follow in order to identify possible strategies for regaining lost ground.

The table thus highlights the fact that the 15 TLDs selected represented 60% of the names filed in the 1,152 nTLDs at 31 December 2022 (compared with 56% in 2021), and 71% of the names created in these same nTLDs during the past year (compared with 70% in 2021 and 71% in 2020).

The stocks of the two categories, whether in the sample group or not, followed sharply different trends in 2022. Whereas the leaders gained 6% (due in particular to the .CYOU and .ICU domains) the other nTLDs gained 9% in stock. The contrast is less marked for create operations, with changes of +5% and +6% respectively.

The factor explaining these two behaviours is the retention rate, which went from 22% to 38% for the leaders and from 78% to 65% for the others. Conversely, the leaders have an excellent creation rate (65%) while the others are at 40%, for a creation rate of 55% for nTLDs as a whole.

So, two "populations" coexist: on the one hand "hyperactive" nTLDs corresponding more or less to "penny nTLD" profiles (strong creation rate, weak retention rate), and on the other hand nTLDs that are less dynamic but that evolve "normally" for TLDs with several years of existence, with less high creation rates but higher retention rates.

	Stocks (thousands)		Create operations (thousands)		% Creations		%Retention			
	2021	2022	2022	2021	2022	Var.	2021	2022	2021	2022
.XYZ	4 286	4 563	6%	3 231	3 197	-1%	75%	70%	30%	32%
.ONLINE	2 110	2 346	11%	1 334	1 492	12%	63%	64%	41%	40%
.ТОР	1 661	2 124	28%	1 212	1 489	23%	73%	70%	21%	38%
.SHOP	1 107	1 528	38%	<i>7</i> 23	1 056	46%	65%	69%	47%	43%
.SITE	1 253	1 297	3%	867	910	5%	69%	70%	22%	31%
.ICU	610	992	63%	457	800	75%	75%	81%	3%	32%
.STORE	756	963	27%	528	628	19%	70%	65%	43%	44%
.CYOU	368	903	145%	317	683	115%	86%	76%	60%	60%
.VIP	848	706	- 17%	300	318	6%	35%	45%	52%	46%
.CLUB	1 070	704	- 34%	668	288	- 57%	62%	41%	32%	39%
.LIVE	610	696	14%	370	384	4%	61%	55%	53%	51%
.BUZZ	561	689	23%	466	369	- 21%	83%	54%	17%	57%
.APP	1 217	640	-47%	214	195	- 9%	18%	31%	100%	37%
.WORK	526	292	- 44%	282	134	- 53%	54%	46%	34%	30%
.BAR	502	147	-71%	491	90	-82%	98%	61%	9%	11%
Total Top 500K	17 485	18 590	6%	11 460	12 034	5%	66%	65%	22%	38%
Autres	11 194	12 158	9%	4 543	4 833	6%	41%	40%	78%	65%
Ens. nTLD	28 679	30 748	7%	16 003	16 867	5%	56%	55%	39%	48%
% Top 500 K /ens. nTLD	61%	60%		72%	71%					

#### Performance of the main nTLDs (2021 - 2022)

Source: ICANN reports

Sample group composed of nTLDs with more than 500,000 names in their portfolio at 31 December 2021 and/or at 31 December 2022.

The 15 leaders do not constitute a homogeneous group. As the table shows, averages can be misleading: for example the .CYOU domain gained 145% in stock and 115% in create operations, and the .BAR domain lost 71% in stock and 82% in create operations.

#### Matrix analysis inspired by the BCG growth-share matrix

How do we assess an nTLD portfolio from the point of view of a registry, a back-end registry operator or a registrar? The matrix table below highlights the different dynamics found among the TLDs of our sample group and can provide the different players with the keys to understanding.

- One (4 in 2021, 2 in 2020) has both creation and retention rates above the respective averages for nTLDs (55% and 47%). It therefore falls within the "star" category.
- Two (2 in 2021, 6 in 2020) are struggling with creation rates while at the same time benefiting from above-average retention rates.
- Eight (7 in 2021, 8 in 2020) have creation rates above average but retention rates below average.
- Four (2 in 2021, 3 in 2020) are "in the red", with both rates below average.

	Create rate < Average nTLD	Create rate > Average nTLD			
Retention rate >	"Cash Cows"	"Stars"			
Average nTLDs	.BUZZ .LIVE	.CYOU			
	« Dogs »	"Dilemmas"			
Retention rate < Average nTLDs	.APP	.BAR			
	.CLUB .VIP	.ICU .ONLINE			
	.WORK	.SHOP			
		.SITE .STORE			
		.TOP			
		.XYZ			

#### BCG matrix assessment of penny TLDs (2022)

We have used the BCG matrix terminology to determine the position of an nTLD at a given moment. This position is naturally not static and can change. There is a high proportion of "Question marks" with good commercial momentum yet with difficulties retaining holders. The "Star" is the TLD presenting he best attributes in 2022. Conversely, the .XYZ domain, which was once one of the main growth drivers, could be at the root of a weakening of the segment, having one of the lowest retention rates.

The nTLD segment needs to be analysed by putting into proper perspective the impact of the leaders, which are subject to strong fluctuations due to their marketing strategies, just as ccTLDs should be considered without the penny ccTLDs that distort overall performances.

The finding revealed by the above tables contradicts the gloom or pessimism that can be seen in certain specialised publications about new TLDs. In reality, this segment is highly concentrated, and its leaders are not representative of all these new entrants, in their periods of exuberance and of depression.

# 5.9 Market shares of the main back-end registry operators

Back-end registry operators, or "BEROs" developed with the mass emergence of new TLDs during the first ICANN round in 2012 – 2014. We felt it would be interesting to present a progress report on these little-known players who work in the shadows and are responsible for the back-end management of TLDs on behalf of their registries. The market shares given above solely concern nTLDs, although some back-end registries are also active in the ccTLD and Legacy TLD segments.

The following tables show the 13 back-end registries in the world top 10 in terms of the number of nTLDs managed and/or volumes of names under these domains. The breakdown corresponds to the nature of the nTLDs in order to highlight the different back-end registry strategies. nTLD allocations are as known at 31 December 2022. Some transactions that may have been published since 1 January 2023 have not been included if they entered into force beyond that date.

2022	COMM	GEN	GEO	CORP	CORP	Total	%	Var.
Identity Digital	5	280	5	-	117	407	35%	
GoDaddy Registry	1	73	7	1	137	219	19%	
Verisign	-	13	-	-	103	116	10%	
CentralNic	1	70	7	-	28	106	9%	
Nominet	1	7	2	-	55	65	6%	
GMO Registry	-	1	6	-	40	47	4%	
Google	-	27	-	-	19	46	4%	
CORE	-	5	7	-	7	19	2%	
ZDNS	-	12	-	-	6	18	2%	
Tucows Registry	-	16	-	-	1	17	1%	
Afnic	-	-	4	1	7	12	1%	
Beijing Tele-info	-	6	-	-	4	10	1%	
Domain Name	-	-	4	-	-	4	0%	
Others	4	18	19	-	25	66	6%	
Total	12	528	61	2	549	1 152		

#### Number of nTLDs managed by the main BEROs at 31 December 2022

With 407 nTLDs managed, Identity Digital (the group formed in 2021 by the successive takeovers of Afilias by Donuts and of Donuts by Ethos Capital) controlled 35% of existing nTLDs at 31 December 2022, including 53% of generic TLDs and 21% of .BRANDs. P). It is interesting to note that Afilias contributed the majority of .BRAND domains and Donuts the Generic domains, forming a bipolar group with complementary business models. The .Brand TLDs are generally invoiced on a flat-rate basis and thus do not depend on the short-term economic situation, whereas the generic TLDs are often invoiced in proportion to volumes and are therefore more subject to variations in revenue.

The second back-end registry, GoDaddy Registry, manages 219 nTLDs, i.e. 19%, and is the is the .BRAND leader with 25% of the domains in this segment.

The market shares of the others decline rapidly, with 94% of nTLDs accounted for by the total of the 13 leaders.

As a general rule, the positions do not change significantly. Certain extraordinary events such as Nominet's strategic change of direction or UNR's sale of its nTLDs create opportunities, but the number of nTLDs changing hands remains limited compared with

the total number, and the actors are always the same: Tucows Registry is one of the few newcomers.

It can be seen from the table that some back-end registry operators have specialised in generic TLDs (Google and ZDNS, for example) or .BRANDs (Verisign). Generally speaking, "pure" strategies do not exist, often because in 2012 the players did not have a clear view of this market, which was still in its infancy, and simply seized the opportunities presented to them.

The view of volumes of names managed allows us to cross-reference this information with the strategies of the customers of these BEROs.

2022 - in thousands	COMM	GEN	GEO	CORP	CORP	Total	%	Man
CentralNic	0	14 284	70	-	8	14 362	47%	. 4 700
Identity Digital	12	5 818	27	-	12	5 869	19%	. 400
GoDaddy Registry	4	3 658	105	7	3	3 777	12%	. 4 000
ZDNS	-	2 336	-	-	0	2 336	8%	. 400
GMO Registry	-	1 528	192	-	1	1 720	6%	. 005
Google	-	1 083	-	-	0	1 083	4%	005
Tucows Registry	-	669	-	-	0	669	2%	. 000
Domain Name Service	-	-	172	-	-	172	1%	+ 133
Afnic	-	-	38	64	3	105	0%	
Beijing Tele-info Network Tech.	-	91	-	-	0	91	0%	+ 35
CORE	-	17	69	-	1	87	0%	
Nominet	1	49	23	-	4	77	0%	4 000
Verisign	-	12	-	-	2	14	0%	
Others	27	104	251	-	4	386	1%	70
Total	44	29 649	947	71	38	30 748		. 0.000

Volumes of domain names in the nTLDs managed by the main BEROs at 31 December 2022

The market topology in terms of names managed is somewhat different from that of the number of nTLDs. For this measurement, CentralNIC is the uncontested leader with a 47% market share (48% of names registered in generic TLDs) despite only managing 9% of nTLDs. This is due to the fact that the .XYZ domain is notably one of its clients. BEROs with the major

"penny TLDs" in their portfolio are seeing their weight magnified by the aggressive strategies of their clients, but they are also enduring the backlash of these choices in terms of performance and volatility.

The relatively small volume of names managed by Verisign - a "gorilla" in the market as the .COM registry - is noteworthy. This company has found itself positioned on .BRAND domains as a result of the commercial agreements reached during the 1st round, but does not seem to have been actively involved in the development of its positions in the nTLD segment, no doubt to avoid competition with .COM which still prevails in the Internet naming culture in North America.

The heavily negative score of Nominet, which lost nearly 1.7 million names, is the consequence of strategic re-centring imposed by the new management. Some of its other clients are probably thinking of no longer partnering with a player whose future on the back-end market seems compromised or in any case not easy to read, and some may even have already taken steps in this direction.

# 6. The distribution of domain names in the world at year-end 2022

The analysis of the development of the major segments of the domain name market, Legacy TLDs, ccTLDs, and nTLDs, can be completed by studying the distribution of stocks of these same segments in the major regions of the world.<sup>1</sup>

By convention, we have used the ICANN regional nomenclature for general reference, even though it can sometimes be open to discussion.

Here we present, as we have done since 2018, the proportion of each major segment in the various ICANN regions.

## 6.1 Overview

In 2022, the .COM domain was still the market leader, with a 46% market share (-1 pp), followed by the ccTLDs (excluding penny TLDs) with 38% (unchanged). The other two segments, Other Legacy TLDs and nTLDs, accounted for 9% and 7% of worldwide registrations respectively (compared with 9% and 6% in 2021).

<sup>&</sup>lt;sup>1</sup> For the .COM domain, Legacy TLDs and nTLDs, the distribution of names by holders' regions has been estimated thanks to data provided by ZookNic.

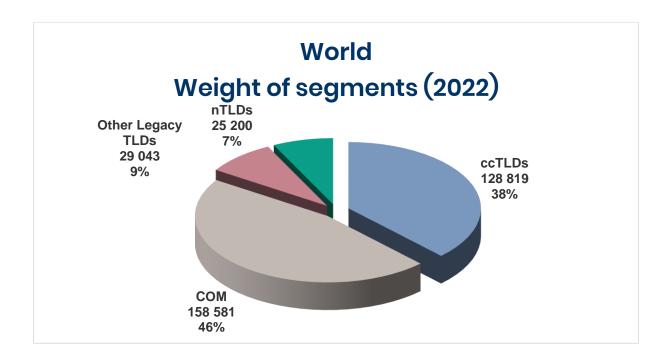


Figure 10: World - Weight of different segments (2022)

As we shall see, these global data conceal significant regional disparities, which evolve slowly since they are structural characteristics of the market in each region.

# 6.2 Weight of segments in Africa

In Africa, local ccTLDs are the leaders, with a 65% market share (compared with 65% in 2021, 60% in 2020 and 53% in 2019), while the .COM domain comes in second place with 29% (compared with 30% in 2021, 32% in 2020 and 38% in 2019). Other Legacy TLDs represent 4% (compared with 4% in 2021, 5% in 2020 and 6% in 2019) and nTLDs remain marginal with 2% (3% in 2019, 2020 and 2021).

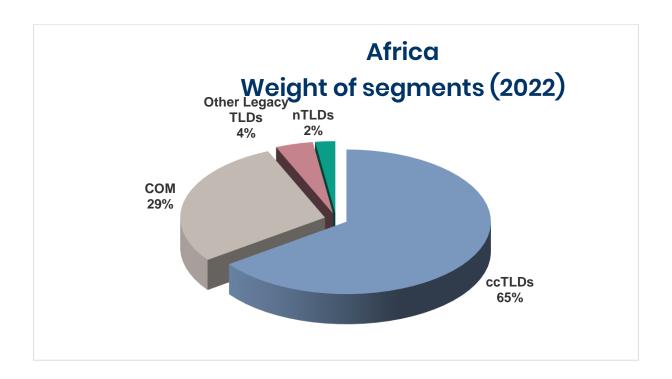


Figure 11: Africa – Weight of different segments (2022)

An overview of local dynamics, thanks to an analysis of trends, shows that ccTLDs are thriving in Africa (+12 pp market share in four years) while the .COM domain is steadily losing ground (-9 pp in four years). This situation almost certainly results from an effort on the part of African registries to increase their attractiveness in the face of the .COM domain, even though some are still struggling to align their rates with those of .COM due to their low volumes.

# 6.3 Weight of segments in Latin America

ccTLDs dominate in Latin America and the Caribbean with 70% of the market (69% in 2021, 60% in 2020 and 56% in 2019). The .COM domain remains stable at 24% (22% in 2020) while the Other Legacy TLDs continue their slow decline to 3% (4% in 2021 and 5% in 2020). nTLDs are holding steady at 3%.

It should be borne in mind, however, that the "official" geographic breakdown of names is subject to various biases, notably the existence of large registrars in Panama offering proxy services.

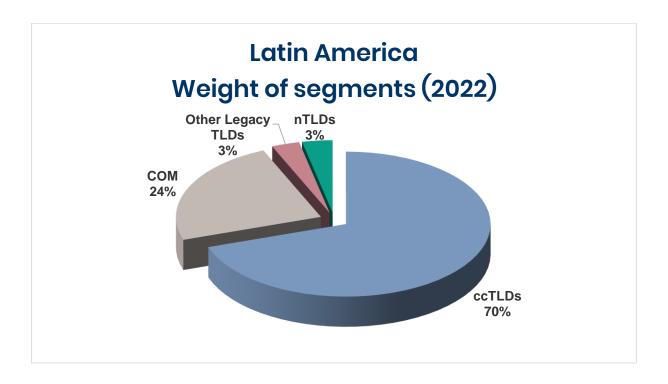


Figure 12: Latin America – Weight of different segments (2022)

There is a strong preference in Latin America and Africa for local ccTLDs, which also benefits regional economies as opposed to the .COM domain and the Other Legacy TLDs whose profits are taken by registries mostly located in the United States.

# 6.4 Weight of segments in Asia-Pacific

The situation in Asia-Pacific is almost the same as in Africa and Latin America: ccTLDs are the market leaders (48% market share compared with 46% in 2021 and 51% in 2020), followed by the .COM domain which continues to advance appreciably in the long term (36% in 2022, 37% in 2021, 30% in 2020 and 27% in 2019), Other Legacy TLDs (stable at 6% compared with 5% in 2020) and nTLDs which are losing ground in the long-term (10%, compared with 11% in 2021, 14% in 2020 and 16% in 2019).

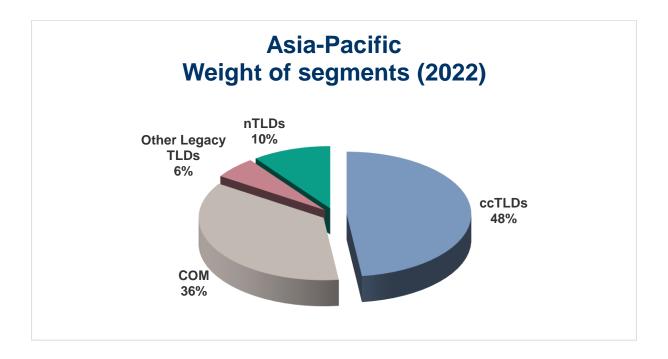


Figure 13: Asia-Pacific - Weight of different segments (2022)

# 6.5 Weight of segments in Europe

It is in Europe that ccTLDs historically have the biggest share, with 61% in 2022 (compared with 62% in 2019-2021). The .COM domain is also very stable at 29% since 2020 (27% in 2019). The slight fall in ccTLDs benefits Other Legacy TLDs (7%, +1 pp), nTLDs remaining stable at 3%.

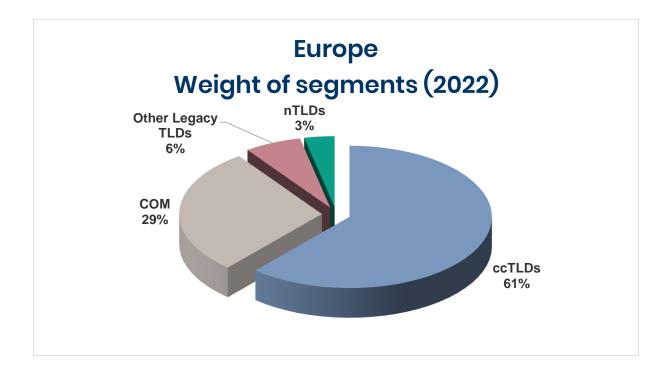


Figure 14: Europe – Weight of different segments (2022)

The landscape of the European market shows a net preference on the part of the region's users for their national ccTLDs, although the .COM domain still accounts for just less than one-third of all names registered. But the Other Legacy TLDs and nTLDs remain marginal – 9% between them – and there are no signs of any breakthrough.

This finding also reflects the power of distribution networks and their own cultural prisms (given that registrars naturally promote what they think clients want to buy, which creates a certain inertia that favours TLDs well known to the public and disadvantages new entrants).

# 6.6 Weight of segments in North America

How can we explain that the .COM is world leader when it is "only" a challenger of ccTLDs in all the regions we have studied? The answer is simple: with its weight (73% in 2022, 76% in 2020 and 2021, 75% in 2019) it crushes the other segments in the North American region, which accounts for 38% of the world market (36% in 2021) as against 36% for Europe (37% in 2021), 20% for Asia-Pacific (21% in 2021), 5% for Latin America and the Caribbean and 1% for Africa. The relative weight of North America increased in 2022, to the detriment of Europe and Asia-Pacific.

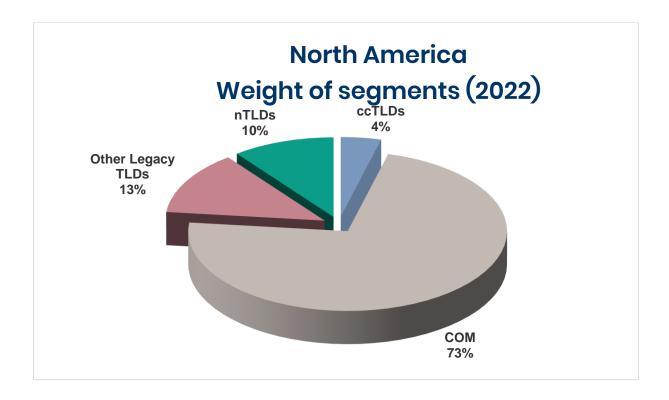


Figure 15: North America- Weight of different segments (2022)

While the national preference is for ccTLDs in four of the ICANN regions, they are marginal in North America (and of course especially in the United States), with just 4% of the market. The .COM domain holds three-quarters of the market and the Other Legacy TLDs have a market share of 13% (13% in 2021, 14% in 2020), significantly above their weight worldwide.

Lastly, nTLDs are steadily growing with a current share of 10% (7% in 2021, 6% in 2020 and 7% in 2019).

Thus, just as North America is the region that weighs most for the .COM domain, the latter is the most vital TLD for North America, although it is appropriate to qualify this conclusion by mentioning a non-negligible bias factor: domiciliation of proxy services. Just as in the case of Panama, certain big US registrars (particularly GoDaddy and Tucows) automatically domicile all their clients in North America, particularly since the GDPR came into force. It is therefore undeniable that a certain number of domain names associated with the North America region are in fact held by owners located in other parts of the world.

This state of affairs hampers our estimates of market shares, which must be considered in orders of magnitude only.

# 6.7 Summary tables

The tables below summarise the data on the distribution of TLD segments per major ICANN region, as we have been able to consolidate them based on our various sources. They are designed to give the reader as many statistics as possible.

(*)	ccTLD	СОМ	Autres	nTLD	Total	Total	Var.
Africa	3 173	1 391	205	109	4 879	4 602	6%
Latin America & Car.	11 935	4 038	532	579	17 084	16 737	2%
Asia-Pacific	33 005	24 818	3 871	6 999	68 694	67 783	1%
Europe	75 461	35 241	7 914	4 204	122 820	120 921	2%
North America	5 244	93 092	16 521	13 308	128 165	119 135	8%
TOTAL	128 819	158 581	29 043	25 200	341 643	329 178	4%
TOTAL 2021	125 016	155 563	29 016	19 583	329 178		
Var. 2022	3%	2%	0%	29%	4%		

# Distribution (in thousands) of domain names of different TLD segments per ICANN region (2022)

(\*) Excluding penny TLDs. There may be some discrepancies with the data cited above, due to the existence of names for which the country of the holder is not known (for example, 155 million .COM names instead of the total 164 million indicated in the ICANN report).

	ccTLD	СОМ	Autres	nTLD	Total
Africa	65%	29%	4%	2%	100%
Latin America & Car.	70%	24%	3%	3%	100%
Asia-Pacific	48%	36%	6%	10%	100%
Europe	61%	29%	6%	3%	100%
North America	4%	73%	13%	10%	100%
TOTAL	38%	47%	9%	7%	
TOTAL 2021	38 %	46%	9%	6%	
Var. (en points)	-	- 1	0	1	

Weight of each segment in the regional total (2022)

	ccTLD	СОМ	Autres	nTLD	Total	Total	V.
Africa	2%	1%	1%	0%	1%	1%	ı
Latin America & Car.	9%	3%	2%	2%	5%	5%	ı
Asia-Pacific	26%	16%	13%	28%	20%	21%	- 1
Europe	59%	22%	27%	17%	36%	37%	- 1
North America	4%	59%	57%	53%	38%	36%	2
TOTAL	100%	100%	100%	100%			

Weight of regions in the total of each segment (2022)

#### 6.8 Lessons learned

Among the lessons drawn from this 2022 study of the regional dynamics of all TLDs combined, we would highlight the following:

- The nature of the biases identified (proxies) is revealing in itself. Due to the
  dematerialisation of the market, the country of origin is difficult to discern precisely,
  especially for gTLDs (Legacy, Others and nTLDs).
- The Asia-Pacific region benefited least from the recovery in 2022 (+1%), although
  this observation needs to be put into context by reference to the negative 5 million
  names with which the .CN domain burdened the global variation. If the .CN domain
  had been at break-even, the region would have grown by around 6 million names,
  i.e. 9%;
- Europe remains on a positive but moderate trend (+2%), while North America saw strong growth of 8% despite the .COM domain's being at break-even. The bulk of the region's net balance came from nTLDs in 2022 (4.3 million out of 6.2 million).
- Latin America and the Caribbean returned to moderate growth (+2%).
- ccTLDs remained dominant in all of the world's regions with the exception of North
   America, where the .COM domain is the uncontested leader.

- The regional differences are reflected by creation rates and retention rates
  echoing varying dynamics and levels of maturity as well as distinct preferences for
  ccTLDs, Legacy TLDs and nTLDs.
- The topology of the registrar networks is based around user preferences, which it tends to cement in return; the difficulties experienced by many nTLDs are the consequence of this lack of market fluidity.
- The .COM domain presents the situation of a leader confronted with various difficulties. Its great strength lies in being able to rely on the enormous United States market for which the .COM domain is the default option, whereas approaches are much less forthright in the rest of the world. The reduced competitiveness brought about by the price increases will act as a further brake on the dissemination of this TLD in regions where ccTLDs are the popular choice. The TLD likely continues to suffer from a distribution network (ICANN registrars) that is rather poor in big registrars outside the North American continent. This configuration, on which Verisign cannot easily weigh, prevents it from acquiring sufficient market clout to be able to "inundate" certain countries. The .COM domain therefore depends heavily (and will continue to depend more and more) on the North American market, which is itself on the way to attaining maturity and remains subject to the US economic climate. Geopolitical factors may also contribute to weakening its attractiveness outside the area of influence of the United States (there can be no doubt that the Russian and Chinese markets started gradually closing to the .COM domain from 2022). It is therefore possible that its situation is less rosy, strategically speaking, than it appears. The price increases which started in 2021 and continued in 2022 and 2023 will doubtlessly be an important factor in the evolution of the .COM TLD in the years to come.
- The topology of the distribution network is a key factor for success or failure, the
  importance of which it is difficult to apprehend in the absence of clear data on the
  matter. Its impact nonetheless makes itself felt in all regions and all segments. In

North America, Asia-Pacific, in Europe to a somewhat lesser extent and in Latin America and Africa to a much lesser extent, the presence of major ICANN registrars favours the dissemination of generic TLDs. In places where these registrars are less present, or smaller, the market power of the generic TLDs is comparable with or less than that of the local TLDs offered by registrars that are too small to be ICANN registrars but more numerous and providing better territorial coverage. Here we can see just how important it is for registrars to develop their networks of resellers.

- These "market topology" factors come on top of the cultural factors. Generic TLDs
  dominate in North America, which is what led to the emergence of very large
  ICANN registrars. In the other regions, preferences are fairly clearly for ccTLDs,
  which favours the local registrars though at the same time it forces them to offer
  local TLDs themselves.
- Asia-Pacific is the region where the lines are still least shared, ccTLDs representing
  just half of names and the various generic TLDs sharing the rest. Users'
  spontaneous preference for ccTLDs combines with the big domainers' desire for
  nTLDs, making this a market with good potential for new entrants.

# 7. Highlights 2022 and early 2023

The shifts in the market observed since 2015 continued in 2022, maintaining a degree of intensity, in particular due to purchases of nTLDs,

The fundamentals remain unchanged:

- Renewed growth but uncertainty as to the future leading to external growth strategies (achieving a critical mass, spreading risks, acquiring new key success factors) and innovation (new key success factors, diversification).
- The role of financiers as external equity providers on the market remains vital: in comparison with Verisign and its handsome profit margins, the main registrars sometimes struggle and are only able to finance major acquisitions by resorting to the market.
- The IPO of Ionos, a subsidiary of United Internet AG, is one of the notable events of the period (February 2023).
- ICANN's recent efforts towards a second round respond to the expectations of
  actors who are already geared up for battle: Identity Digital, which has
  consolidated Afilias and Donuts, CentralNic, GoDaddy Registry which has acquired
  Neustar Registry, newcomer Tucows Registry, ZDNS and a few others are all in the
  starting blocks for new openings and are pressuring ICANN in this regard.

Added to these contextual factors are the constant efforts being made as regards innovations, structured around some promising pathways but which have so far not led to any truly "disruptive" offerings.

## 7.1 A TLD market that is still active

The movements identified in 2022 and in the first quarter of 2023 are referred to hereunder. They do not constitute an exhaustive list of sales and changes of back-end operators, since we report here only such transactions as were publicised or that we have detected through our monitoring.

#### 7.1.1 Change in delegatees / registries

Purchases of nTLDs remained active in 2022. We have identified the following transactions, but this list, based on newspaper articles and data from nTLDstats.com may not be exhaustive, in the absence of official data communicated by ICANN.

New Delegatees	Old Delegatees	Nb	nTLD
Bank of America	NMS Services	1	BOFA
Identity Digital	Afilias & Donuts	262	Détail non fourni pour des raisons de
	Asiamix Digital	1	.FAN
	Boston Ivy	4	.BROKER, .FOREX, .MARKETS, .TRADING
CAM Connecting	Webconnecting Holding	1	.CAM
CentralNic	Regiodot	1	.RUHR
Dot Hip Hop	UNR	1	.HIPHOP
Flickr	Yahoo! Domain Services	1	.FLICKR
Guangzhou YU Wei Information and Technology	Xinhua News Agency Guangdong Branch	1	.新闻 (xnefvy88h)
Helium TLDs	Suhub Electronic Establishment	1	(xn4gbrim) موقع
Home Depot Product Authority	Homer TLC	1	.THD
Intercap Registry	Dot Registry	1	.LLP
I. B. M.	The Weather Channel	2	WEATHER, WEATHERCHANNEL
Internet DotTrademark Organisation	Huyi Global Information Resources	2	.商标 (xnczr694b), .餐厅 (xn imr513n)
Nawang Heli(Xiamen) Network Service	MMX / Minds + Machines	1	.购物 (xng2xx48c)
NeuStar	GoDaddy Registry	1	.NEUSTAR
Nova Registry	UNR	1	.LINK
OATH	Yahoo! Domain Services	1	.ҮАНОО
PIR (Public Internet	Donuts	2	.CHARITY, .GIVES
	Giving	1	.GIVING
GoDaddy / Registry	CLUB Domains	1	.CLUB
	iSelect	2	.COMPARE, .SELECT
	MMX / Minds + Machines	21	.ABOGADO, .BEER, .BOSTON, CASA, .COOKING, .DDS, .FASHION, .FISHING, .FIT, .GARDEN, .HORSE, .LAW, .LUXE, .MIAMI, .RODEO, .SURF, .VIP, .VODKA, .WEDDING, .WORK, .YOGA
	Open Universities	2	.COURSES, .STUDY
	Top Level Design	1	.DESIGN
	UNR	1	.BLACKFRIDAY
Tucows (?)	UNR	10	.CLICK, .GIFT, .HELP, .HIV, .JUEGOS, .PHOTO, .PROPERTY, .SEXY, .TATTOO, .TRUST
DotXYZ	UNR	10	.AUDIO, .CHRISTMAS, .DIET, .FLOWERS, .GAME, .GUITARS .HOSTING, .LOL, .MOM, .PICS
	eCOM-LAC	1	.LAT
	Accent Media Limited	1	.TICKETS
TOTAL GENERAL		337	

## 7.1.2 Back-end operators

Changes in back-end registry operators identified in 2022 from press sources and nTLDstats.com:

New Back-ends	Old Back-ends	Nb	nTLD
Beijing Tele-info Network Technology	Afilias	1	.手机 (xnkput3i)
CentralNic	UNR	11	.AUDIO, .CHRISTMAS, .DIET, .FLOWERS, .GAME, .GUITARS .HOSTING, .LLP, .LOL, .MOM, .PICS
	Network Information Center México	1	.LAT
	Knipp Medien und Kommunikation	1	.RUHR
	Afilias	1	(xn4gbrim) موقع
GoDaddy Registry	Afilias	1	.GODADDY
	CentralNic	4	.DESIGN, .GAY, .INK, .WIKI
	Nominet	21	.ABOGADO, .BEER, .BOSTON,
Guangzhou YU Wei Information and Technology	ZDNS	1	.新闻 (xnefvy88h)
Identity Digital	Afilias	400	Détail non fourni pour des raisons de place
	GoDaddy Registry	3	.BARCLAYCARD, .BARCLAYS, .GIVING
	Nominet	1	.BRADESCO
	Verisign	2	.CRS, .OBI
Internet DotTrademark Organisation	ZDNS	2	.商标 (xnczr694b), .餐厅 (xn imr513n)
Knipp Medien und Kommunikation	Nominet	1	.BAYERN
Nominet	GoDaddy	1	.IEEE
	GMO Registry	1	.PIONEER
Tucows Registry Services	CentralNic	1	.LOVE
	UNR	16	.BLACKFRIDAY, .CLICK, .COUNTRY, .CREDITUNION, .GIFT, .HELP, .HIPHOP, .HIV, .JUEGOS, .LINK, .PHOTO, .PROPERTY, .SEXY, .TATTOO, .TRUST, .YANDEX
TOTAL		470	

A total of 470 nTLDs changed BERO in 2022, but this figure is exceptional due to the merger of Donuts and Afilias into Identity Digital.

The domain profiles in comparison with this delegated management market for top-level domains remain unchanged from those we described in previous editions of this study:

- the major generic TLDs like .COM, .NET, .ORG, .BIZ and .INFO are practically unmovable, although their management is covered by contracts between ICANN and the registries which periodically come up for renewal;
- the major ccTLDs are in a stable situation fairly comparable to the domains of the previous category, but being more closely controlled by their governments, mostly follow the principles of a cost-oriented management approach. The price differential between Legacy TLDs and ccTLDs will therefore probably continue to widen in the coming years, benefiting the ccTLDs (a number of which we see have also started increasing their prices, due to inflation, a movement that is likely to become widespread in the future);
- geo-TLDs remain attached to the regions or cities that they designate. They are therefore unlikely to be sold or transferred, but may well change back-end operator;
- BRAND names are also linked to their registries when they are used, but they may
  also be sold and transformed into generic TLDs if their initial registries have not
  used them.
- generic nTLDs, regardless of size, are the most "volatile" in terms of both the level of sales/disposals and their back-end operation.

This segmentation can result in fairly differentiated profiles of back-end operating offers, while we see a certain number of players attentive to the opportunities that could be presented in terms of straight acquisitions. The fragile financial position of many registries adds to this volatility.

# 7.2 Mergers and acquisitions: continuous consolidation, accompanied by financiers

Mergers and acquisitions, which have proliferated in our market for some years, are largely made possible by the flow of capital resulting from financial groups taking equity interests. This phenomenon continued in 2022/2023.

#### Registrars

- United Internet AG floated its subsidiary Ionos on the stock market. The structure comprises Sedo, InternetX, Strato, United Domains, Arsys, etc. as well as Ionos (ex 1&1). Ionos posted annual revenues of €1 billion.
- The French registrar Gandi merged with TWS, of the Netherlands, to form
   Your.Online.
- Singaporean registrar Gname, which specialises in drop catching, created 100 subsidiaries, each of which has obtained the status of ICANN registrar (annual budget of at least \$400,000). These 100 subsidiaries are in addition to the 50 that were already ICANN registrars. Gname managed 1.9 million .COM names at the end of August 2022, as against 0.4 million at the end of August 2021.
- Webcentral.au, the holding company of MelbournelT, decided to attack the key
  accounts market once again, after MelbournelT's key accounts business had been
  sold in 2013 to CSC.
- Newfold Digital acquired the registrar MarkMonitor for \$302.5 million from
   Clarivate. Markmonitor is specialised in services to major corporates. Newfold
   Digital was known as Endurance International before being acquired by Clearlake
   Capital Group in 2021 and merged with Web.com which had also been acquired by
   Clearlake. Apart from Web.com, Newfold Digital owns major long-established

registrars such as **Network Solutions**, **Bluehost**, **Register.com**, **Domain.com** and the **Namejet** and **SnapNames** snapping services. It is not listed.

 GoDaddy acquired DAN.COM, one of the last remaining independent secondary marketplaces. The secondary market is one of the most dynamic segments of GoDaddy's (AfterNic's) business portfolio.

#### Registries

- In an interview, the CEO of Radix summed up his positioning as regards nTLDs by comparing it to that of Donuts: "Donuts went for the long tail, category-specific names. Our idea was to launch TLDs that had mass-market potential."
- **IIS.SE** (registry of the .SE domain) acquired 20% of **iQ.global**, a company specialising in analytics and security services for registries and registrars (for example detecting domain names that might cause problems).
- As part of its strategic reorganisation, Nominet, the registry for the .UK domain, disposed of its cybersecurity business for US\$23.5 million.
- Donuts and Afilias, subsidiaries of Ethos Capital, merged to form a new brand,
   Identity Digital
- CentralNic acquired California-based registrar Intellectual Property

  Management Inc (IPM) for US\$7.6 million. IPM specialises in services to major corporates. It also spent US\$5.2 million on acquiring a portfolio of websites generating revenues by monetising traffic, and US\$19 million on acquiring Israeli marketing company Aporia. The departure of its CEO Ben Crawford in

  December 2022 coincided with a strategic reorientation: the company will not carry out any more major acquisitions in 2023 but will seek to optimise the profitability of the portfolio of businesses built up through multiple acquisitions over the past few years. It also announced a £4 million share buyback programme.

UNR (UniRegistry), acquired by Shayan Rostam, was renamed INC (Internet
Naming Company). The company holds the nTLDs .CLICK, .COUNTRY, .HELP, .FORUM,
.HIV, .LOVE, .PROPERTY, .SEXY, and .TRUST, for a total of around 350,000 domain
names.

#### 7.3 New services

Confronted by a certain sluggishness in their environment, players in the domain name market have continued their efforts in terms of innovations and the search for diversification paths, many of which are linked to the fight against abuse via the DNS.

2022 saw the emergence of the problem of "Blockchain Domains" and other crypto-TLDs, which ARE NOT domain names but "blockchain identifiers", although certain actors seek to maintain confusion on this subject in order to have their services accepted.

We have endeavoured to group these burgeoning initiatives into a few major themes, mentioning various examples without claiming to be exhaustive.

- Dutch registry SIDN added the detection of logos to its BrandGuard service, which
  is also offered to SMEs, but works only for the .NL domain.
- Belgian registry DNS Belgium made its crawler Mercator open source. Mercator scans recently filed domain names, classifying their profiles and detecting potential cases of abuse. The points covered are:
  - o DNS records, data used to translate your domain into an IP address
  - Location: where is the web page hosted, where are the name servers and
     SMTP servers located?
  - Web content such as html code, VAT number, a screenshot of the homepage, web technologies used

- Information about the outgoing mail server
- TLS configuration for a secure connection to the Internet.

#### Crypto-TLDs, blockchain "domains"

- Portuguese registry DNS.PT published a study entitled "Blockchain Address
   Transparency with DNS": "In a partnership between .PT, Instituto Superior Técnico
   and INESC-ID, we studied an alternative solution: using DNS as a name service for
   the Blockchain world. The idea is to store associations between names and
   Blockchain addresses in DNS. This solution is simple, free for anyone who has a
   domain name, and offers guarantees similar to those provided by Blockchain ones.
   After all, DNS is also replicated, managed by different, independent entities spread
   across the world."
- Blockchain.com and Unstoppable Domains joined forces to launch the .BLOCKCHAIN domain. "Registry" of crypto-TLDs linked to blockchain and offering NFTs, Unstoppable Domains needs to expand its user base very quickly in order to attain critical mass; Blockchain.com brings it a base of more than 83 million contacts. Since the .BLOCKCHAIN domain was not created in the root managed by ICANN, the names under this domain will not be accessible to users without technical adaptations.
- Following its US\$65 million fund-raising, Unstoppable Domains is valued at more
  than US\$1 billion. It has signed a contract with the city of Miami to offer identifiers in
  its blockchain-based alternative root. The city of Miami has already registered the
  .MIAMI domain but seems more interested in the services of Unstoppable Domains.
- Japanese registry and registrar GMO has signed a partnership agreement with
   Unstoppable Domains in order to offer Unstoppable Domains' crypto-TLDs on the
   Japanese market. The service is called CryptoName (https://cryptoname.jp/). The
   .nfts currently offered are: .x, .crypto, .wallet, .bitcoin, .dao, .888, .zil, and .blockchain.

# 8. Conclusions and outlooks

2022 was marked by a "return to normal", which translated into a relative homogenisation of growth rates of the various segments. It was also a year of significant slowdown in the growth of the .COM domain. It is not yet clear whether this slowdown will prove lasting or whether it will be followed by a rally from 2023 on.

In general, the effects of the acceleration of the digital transition seem to have been consolidated as far as ccTLDs are concerned, nTLDs for their part having weathered the consequences of the purge of the .ICU domain very well. Other Legacy TLDs continue their slow decline, but the fact that their creation rates remain at the usual levels shows that the most significant of them have retained their markets for now. The price increase of the .NET domain, effective from February 2023, could in time upset the balance of this TLD.

#### Strategic presence options

An analysis of market shares, whether at the level of TLDs, registrars or back-end registry operators, reveals that the domain name sector is more than ever divided between a handful of major players accounting for the majority of market shares and a spattering of small players who essentially have four options:

- Implementing aggressive development strategies financed by financiers (debt, fund-raising, stock market listing)
- · Staying in a niche market and protecting their profitability
- Surviving until they are absorbed by a larger player
- Diversifying their revenue sources by developing new technologies, by "leaving" the market or by partnering with external players.

These different strategic choices are incidentally the same for the major players.

Caricaturing slightly perhaps, CentralNic is emblematic of the first, at least up until 2022,

Verisign the second, and GoDaddy the fourth. A large number of small- and medium-sized players are forced to consider the third option whether they like it or not.

#### The process of concentration is set to continue

The process of concentration continued in 2022 and will continue in 2023, both at the level of TLDs and of BEROs and registrars. It is brought about by a dual phenomenon which looks set to last: on the one hand, financiers' interest in the domain name market; and on the other, the life-and-death quest for critical mass, and failing that, absorption by a bigger player on the best terms possible.

It is by no means certain that the future ICANN round, which now looks as though it might take place in 2025 or 2026, will do much to alter this dynamic. On the contrary, costs are increasing (not to mention the application fees envisaged by ICANN) and newcomers will face even bigger obstacles than their 2012 predecessors did. The BERO market is difficult to access, in view of the skills and the capital required but also because of the need to be able to increase the volume of TLDs and names managed so as to be able to benefit from economies of scale and offer competitive prices. Today's leaders are very likely to be tomorrow's, unless an actor that is currently outside the market were to join it.

Specialisation in a particular segment does not yet seem to be on the agenda, the financial equilibrium provided by the combination of business models (generic or geographic TLDs/.Brand) being so sought after by those who can afford it. The fact that even the leaders are still in search of the size effect shows that the business models are still not satisfactory. A large number of new TLDs may seem like a good solution to this problem, but only if each of them individually can be profitable. The study we have proposed on volume brackets suggests that the success of this approach is by no means a foregone conclusion, particularly as the vast majority of nTLDs opened in the last ten years remain unknown to the public at large. The infusion of new blood is a good thing, but it could also

have dangerously dilutive effects for the weakest players. Another unknown is how welcoming registrars will be towards future TLDs.

The outlook is uncertain. Lined up against the benefits that were brought by the dire COVID episode are the tensions originating in the conflict in Ukraine and the deterioration in relations among the world's top level geopolitical leaders. The prosperity of the domain name market is based on that of the Internet, which itself is posited on a world that prefers openness and communication to any form of "Chinese walls" or partitioning.

In this context, the system of Internet governance of can only be weakened by the growing conflicts among the major players. A situation of dependence reluctantly but quietly accepted for the past twenty years by countries that refuse to enter the US sphere of influence may become unsustainable if their relations with the power holding the keys of the system deteriorates. In 2022 we entered a new geopolitical paradigm, which sooner or later will translate into ways of governing the Internet.

ICANN seems ill-prepared to face this new challenge, or indeed even to organise a "next round". The appearance of blockchain domains and other crypto-TLDs, one of the arguments for which is precisely to escape the ICANN bureaucracy, has been a wake-up call which perhaps provided the stimulus necessary for the organisation's decision to accelerate the process of creation of new TLDs. But these alarm bells could also have been heard elsewhere, not just at Marina del Rey. Several countries are already looking to set up virtual currencies to avoid their own currencies being endangered by crypto-currencies. Could a similar if not identical process not be embarked upon one day for the "alternative roots" populated by misleading crypto-TLDs since they would have no "domains", only the name, but certain aspects of which are attractive?

Habits and usages evolve too, and in 2022 we saw some players disappointed, not to say disillusioned, with the digital transition: VSEs and SMEs which, in France for sure, but certainly in the rest of the world too, did not attain the objectives that they had been led to believe they were entitled to expect by equipping themselves with the classical tools for an

online presence. For some of these, having a website is not indispensable since there are alternatives that can meet their needs. The emergence of "marketplaces" is one of these alternatives which may one day depress the volume of create operations, "vendors" and "producers" preferring to resort to these for anything concerning their online presence. This is a quick-fix solution creating a dangerous dependency; but in the short term it also means domain names that will not be created or perhaps not renewed. The same goes for the development of apps for smartphones, which do not require the use of domain names, while a growing number of users no longer connect except via their smartphones.

The emergence of new risk factors is therefore undeniable, even though the impact on the domain name market will no doubt be slow to materialise in figures. Although many actors are working on innovative solutions that could become sources of diversification, few of those that appeared in 2022 (of which many were focused on the necessary fight against abuse) are likely to revolutionise the market by contributing new perspectives. This stems perhaps from a lack of integration of the "naming layer" with the "interface layers" for users. Domain names, despite all their marketing potential, remain little-known to the public at large, which uses them every day but without really being aware of their existence.

#### Horizontal and vertical concentrations

In the wake of the horizontal concentration operations (between BEROs and between registrars), it would not be surprising to see the number of vertical operations increase in response to this problem of integration of the naming layer with the interface layers.

A new type of actor appeared in 2021/2022, combining the functions of registry and registrar, when not also delegatee. Few groups have completed their transformation: Identity Digital, GoDaddy, CentralNic, and even more recently Tucows. But one of their current subjects for reflection is doubtless how to galvanise their end market – that of the online presence arrangements of which TLDs and domain names are only components.

The experience of CentralNic in capturing and monetising traffic will certainly be emulated in the coming years. As we have seen, increasing the number of TLDs may not be a panacea if usages do not evolve in step. CentralNic seems to have developed an original and promising vision by tying domain names to the monetisation of their traffic. New paths remain to be opened in this direction or others, but the market players are ill-equipped for this task. The registries and other BEROs are rather far removed from the end customer and struggle to make contact with them through registrars, some of whom may choose to live as "rentiers", leaving it to the former to take the risks associated with innovations that they will later sell... if they believe in them.

This situation, one of several sources of inertia, may explain why "real" innovations, whether transitory or lasting, are currently being made in areas connected to the naming system but clearly separate from it, such as the burgeoning market for blockchain identifiers.

Easy access to the end customer and the integration of domain names into tomorrow's usages are the key factors in the continuity of the domain name market on which actors should work in 2023.

In the shorter term, the question of critical mass remains. Verisign and its 164 million .COM names on the one hand, and GoDaddy and its 65 million names under management on the other, are the two giants of the market. While Verisign has not (yet?) equipped itself with a registrar, GoDaddy has succeeded in teaming up with a back-end operator that allows it to work both sides of the fence. It has rivals, but none with the ability to dethrone it in the short term, just like the .COM domain. New partnerships, new mergers and acquisitions among market players or with players close to it - will these be the pertinent responses?

Players that were once outside the market sphere are becoming increasingly present.

Google Registrar and Wix form part of the biggest ICANN registrars although the centre of gravity of their business is outside the domain name market. Perhaps the domain name industry is less and less destined to exist in its current state, gradually dissolving the more

global "online presence" market as part of the ever-greater integration of services of varying natures. This shift could in turn force registrars that had always considered themselves as pure players to undertake now vital diversifications or to become the domain name "component" of bigger structures.

Leading on from this reasoning, it would not be either unexpected or illogical for M&A transactions, which have hitherto tended to take place within the market, to take place more and more on the initiative of "external" players aimed at players in the domain name market, or symmetrically (as we have already begun to see). Although Google has not yet announced the takeover of GoDaddy or Ethos as we predicted in 2021 as a sort of provocation, this working hypothesis may still be on the table in 2023 as in 2022, as may the merger between GoDaddy and Identity Digital or the takeover of CentralNic by one or the other. Nor would it be very surprising if Identity Digital were to seek a listing on the stock exchange before the second ICANN round, so as to be able to finance its candidacies.

Movements in the market capitalisations of the main listed market players show that in 2022 investors were sensitive to the slowdown in their growth, and in certain cases their still, and despite everything, fragile financial structures (although it is excessive to speak of "fragility" in the case of Verisign, the company saw its net margin shrink from 59% to 47%, hence the penalisation on the stock market).

	2020	2021	2022	Var %
CentralNic	0,2	0,4	0,5	+29%
GoDaddy	10,9	12,5	11,9	-13%
Ionos	-	-	2,6	-
OVH	-	3,0	2,4	- 20%
Tucows	0,6	0,8	0,3	-57%
Verisign	18,0	24,7	20.2	-18%

Estimated market capitalisation of some of the main actors on the market at 31 December, expressed in billions of euros

The presence of financiers at the helm of a growing number of groups increases the chances of such operations materialising sooner or later, notably in conjunction with a second ICANN round transformed into miracle solution, which it probably will not be. The

domain name market is more in need of fluidity in its processes (especially for the dot brand TLDs) than of mass creations every ten years.

In the short and medium term, the broad lines of the conclusions drawn in previous years still hold good. The challenge for the entire domain name market is still to move out of a "binary" mode dominated by the .COM in North America by and ccTLDs in the other regions. Unless effective solutions are found, future entrants (.BRAND aside) risk being more or less suffocated between these well-established competitors, the benefits of the diversity that they bring risk not being sufficiently perceived by users or having to be prohibitively priced, hampering their commercial development.

#### Forecasts for 2023

All market segments should grow in 2023, except for Other Legacy TLDs which will no doubt continue to decline, possibly more steeply as a result of the price increases of the .NET domain.

nTLDs have plateaued since the summer of 2022, following a strong creation dynamic in 2021/2022. Freed from the weight of the deletions induced by the creations of 2021/2022, they could see a positive balance in 2023, reaching between 33 and 35 million.

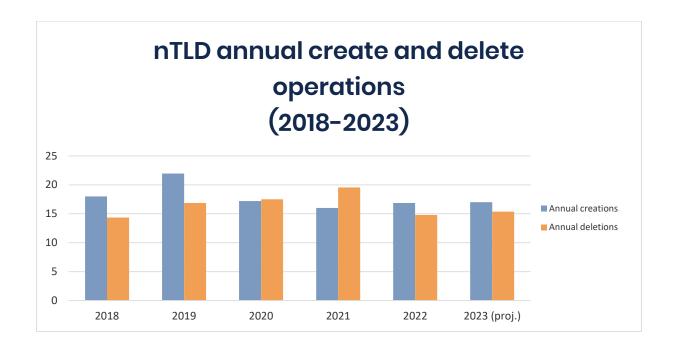


Figure 16: nTLD annual create and delete operations (2018-2022)

The .COM domain should resume its advance from the second half of 2023, unless economic circumstances and its price rises prove stronger than the market dynamic. Its growth should remain modest, in the range of 2% to 5%.

ccTLDs are likely to continue to show positive growth. But the .CN domain still constitutes a big unknown: will it continue to lose stock or will it stage a recovery? The volumes entailed could change the face of the performance of the entire region, and maybe even the ccTLD segment as a whole.

These different assumptions lead to the projections illustrated in the figure below.

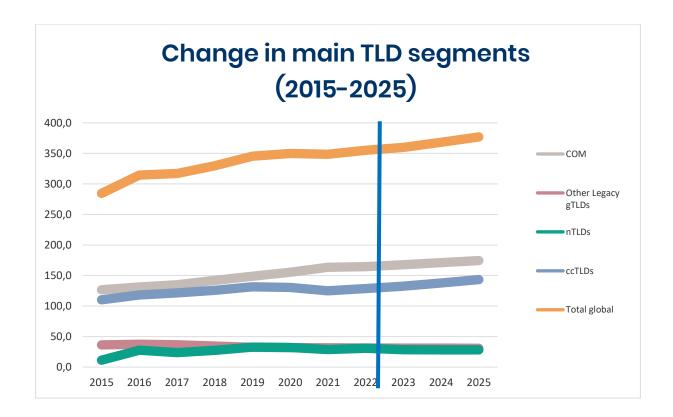


Figure 17: Change in main TLD segments (2015-2025)

The market as a whole will resume its rise in 2023 after the "down time" of 2020 and 2021 and the start of recovery in 2022. The .COM domain will resume its growth, but at a more moderate pace than in 2019–2021, ccTLDs will continue to develop in accordance with their own regional dynamics and the two other segments will struggle to see significant growth.

Our "forward-looking" conclusions from 2021 and 2022 remain broadly unchanged in 2023.

Faced with these complicated market conditions, which are difficult to interpret in terms of their medium- and long-term implications, the two underlying trends, which are the concentration of players and the search for innovations in themes connected with domain names (Data, Cybersecurity, IoT, digital identities, etc.), will remain topical.

They may even become more pronounced, with domain names gaining in meaning and value as they become more associated with habits and practices.

The constant evolution of habits and practices makes innovation a permanent driver of this market and an imperative necessity for all its players.

But the landscape of the market itself will evolve as the pure players become ever fewer and the process of alliances, mergers and acquisitions with other players in the "online presence" value chain moves on.

The players in the domain name market must reinvent themselves, expanding their horizons and optimising their value chains. They have the means and the skills with which to do so, but must not waste time in view of the alternatives that are slowly emerging around them.